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FIRST ANNUAL REPORT
OF THE
State Fire Marshal
OF
ILLINOIS

FOR YEAR, 1911

CORNELIUS J. DOYLE,
State Fire Marshal
Springfield

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State Fire Marshal

Springfield



SPRINGFIELD, ILLINOIS

ILLINOIS STATE JOURNAL CO., STATE PRINTERS

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State Fire Marshal Department

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SPRINGFIELD, ILL.

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W. S. Hoopes, First Deputy State Fire Marshal.

Deputy State Fire Marshals

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D. N. Blazer, Aledo.
A. H. Bogardus, Jr., Springfield.
R. B. Conolly, Waukegan.
S. Legried, Centralia.
H. S. Lovejoy, Springfield.
R. B. Lytton, Metropolis.
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Frank L. Salisbury, Second Deputy State Fire Marshal.
Neils Juul, Jr., Deputy State Fire Marshal.

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Hon. Fred W. Potter,
Insurance Superintendent of Illinois,
Springfield:

DEAR SIR—Complying with section 15 of "An Act creating the Department of the State Fire Marshal of Illinois," approved June 5, 1909, in force July 1, 1909, I beg to submit the following report for the Department of the State Fire Marshal from August 1, 1911, to December 31, 1911.

By way of explanation I desire to suggest that while this Act was in force July 1, 1909, owing to the failure of the General Assembly to pass an appropriation bill for the use of the funds of the State Fire Marshal Department it was impossible to put into practical operation this law or to organize this Department until the said funds were available. The last General Assembly of Illinois passed the appropriation act making the funds of this Department available and on July 1, 1911, a permanent organization of this Department was effected. Therefore, this report covers the practical working of this Department from August 1, 1911, to December 31, 1911, a period of five months.

The object of the State Fire Marshal law is to secure a reduction of the enormous fire waste that annually takes place in this State. The fire waste last year in Illinois was approximately \$11,000,000.00. This burden is a drain upon the resources of our people. From the statistical reports on file in this Department I am of the opinion that fifty per cent of this fire waste in Illinois is preventable. Three great causes stand out prominently as the preventable portion of this loss to our people:

First—Fires caused by criminal carelessness;

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Second—Fires caused by criminal ignorance; and,

Third—Fires caused by deliberate arson.

The Department of the State Fire Marshal is supported by an assessment of one-fourth of one per cent of the gross premiums of all fire insurance companies doing business in Illinois. It is a Department of the State which is not supported by taxation.

The fire insurance companies doing business in Illinois paid into the State treasury for the maintenance of this Department last year about \$60,000.00. Of this sum the Legislature appropriated \$49,500.00. Under the law creating this Department this fund is treated as a special fund for the maintenance of the Fire Marshal Department only, and if there should be an unexpended balance of this fund it can never be used for any other purpose, nor be mingled with the moneys of the State, but must, under the law, be carried forward to the next fiscal year, and the next assessment correspondingly reduced. It will thus be seen by reason of the failure of the last Legislature to appropriate the \$60,000.00 paid in, that there is a remaining balance of this special fund amounting to approximately \$10,500.00, which amount is greatly needed to make a more complete organization of this Department.

All of the money paid in for the support of this Department should be made available on account of the tremendous fire waste going on in this State. Ohio, the fourth state in the Union, collects from the fire insurance companies \$69,000.00, and the legislature appropriates \$69,000.00. Ohio is thus enabled to have thirty-two deputies in its fire marshal department. Illinois, the third State in the Union in population and greater property interests than Ohio, can have under the present appropriation but seventeen deputies for the entire State. In the city of Chicago which is almost one-third of the State of Illinois, at least ten deputies are needed to cover the work incident to

this Department. Under the limited appropriation hereinbefore referred to it has been possible for us to have but three deputies in the city of Chicago and one of these deputies has been used from one of the country counties in the Chicago office. Inasmuch as it is the intention of the law and the fire insurance companies who pay for the entire support of this Department to have all the money available for this Department, I especially urge that you use your influence as Insurance Superintendent with the next Legislature to recommend that the appropriation for the use of this Department shall be the amount of money approximately paid in of not less than \$60,000.00.

I also desire to call to your attention and earnestly recommend that the salary of the Marshal, Assistant Fire Marshal and First Deputy should be increased. New York state pays its State Fire Marshal \$7,500.00 a year. Pennsylvania pays its State Fire Marshal \$6,500.00. Illinois pays many secretaries of various boards upwards of \$3,500.00 a year, while the State Fire Marshal under the present law is paid but \$3,000.00 a year. The State Fire Marshal law requires the State Fire Marshal to devote all of his time to the work of this office and on account of the legal questions constantly appearing and incident to this work the law contemplates that the State Fire Marshal shall be an attorney. I believe that the work incident to this Department, requiring all of the time of the State Fire Marshal, the Assistant State Fire Marshal and the First Deputy, and the responsibility incident to these offices entitles them to a salary equal to that of heads of other responsible departments of this State. I, therefore, trust that you will recommend that the salary of the State Fire Marshal be fixed at a sum not less than \$5,000.00 per annum; that of the Assistant Fire Marshal at \$2,500.00 per annum and that of the First Deputy at \$1,800.00 per annum.

When the State Fire Marshal law was framed it provided that township clerks of all counties in this State should report all fires occurring in their townships lying outside of the incorporated cities or villages. Evidently the fact that Illinois has seventeen counties not under township organization was not taken into consideration. It will thus be seen that under the law no proper officer was designated to report fires in these counties. I also suggest that many complaints have been received on account of the inadequate fees paid to township clerks who receive but fifty cents for reporting fires and mileage one way at fifteen cents. I earnestly recommend that the law be amended so as to give to each township clerk in counties under township organization and each clerk of a road district in counties not under township organization a fee of \$1.00 for reporting each fire and ten cents per mile each way travel.

Considerable confusion has arisen with reference to fees paid to mayors and chiefs of fire departments in cities and villages throughout the State by reason of the fact that many of these mayors and chiefs of fire departments receive only a very small salary and yet, under the present law are excluded from receiving fees from this Department for reporting fires. I would earnestly recommend that the law be amended in that respect so that all mayors and chiefs of fire departments in cities and villages who receive a salary of \$100.00 or less per annum shall receive the sum of \$1.00 for reporting each fire occurring in their respective city or village.

I would further recommend that the law with reference to the construction of fire escapes and for the maintenance thereof be placed under the jurisdiction and control of the State Fire Marshal Department. I find that many appeals are made to this Department with reference to the safety of lives of inmates of buildings on account of inadequate fire

escapes and at present the supervision of failure to erect fire escapes in most counties is under the control of the board of supervisors. I believe that one department engaged in constant inspection of these conditions such as the State Fire Marshal Department could better handle the question of fire escapes than any other department of the State government.

I desire further to recommend that the State Fire Marshal law be so amended as to provide police power to the State Fire Marshal, the Assistant State Fire Marshal and all Deputies of this Department. We find that in the practical working of this Department oftentimes a suspect of incendiarism escapes by reason of the fact that we have not the proper police officer at hand to make an arrest or serve a warrant. In many ways this police power would be a great aid in expediting the work of this Department.

I believe the most valuable, because the most enduring, work that could be done for the reduction of the tremendous fire waste in this State and the loss of life and property, would be by the promotion by educational means of the knowledge of the causes, dangers and prevention of fire. To this end I believe that the State Fire Marshal law should be so amended as to provide instruction in this subject in all public schools in the State and the law make it obligatory upon teachers of public and private schools in all buildings of more than one story to have at least one fire drill each month of the school year.

There has been formed an association in this State known as the Fire Prevention Association of Illinois. This Department has done everything in its power to encourage the work of this association. An outline and program for the coming year indicates that this Fire Prevention Association intends to hold meetings in various cities throughout the State twice each month. It is the purpose of the association to make inspections in the city visited and to hold a meet-

ing of all citizens and to coöperate with the city council and various civic organizations in an awakening to a realization of the tremendous fire waste in this State and to encourage every movement looking to the reduction of it.

In addition to the work of the State Fire Prevention Association the State Fire Marshal has from time to time delivered addresses upon the subject of fire waste and fire prevention in nearly one-half of the larger cities of this State. The State Fire Marshal in these addresses has called attention to the tremendous fire waste in Illinois and pointed out the means of saving millions of dollars worth of our property to our people and a reduction of the enormous fire premiums prevalent in this State. These benefits are to be secured for our people without cost to them, by earnest and hearty coöperation in the work of conservation which this Department has in charge. It is the greatest economic problem before our people today. A loss by fire is a loss forever. We reason from a wrong premise when we figure that a loss by fire covered by insurance is not a loss to our people. The fire insurance companies, whether stock or mutual, only pay the money for burned property which is paid by the people in premiums or assessments.

Continental Europe has long recognized and acted wisely in this conservation movement. The German pays about eleven cents per capita for the fire waste of his country while our people pay about three dollars per capita. If all the buildings burned in the United States last year could be placed on a lot of sixty-five foot frontage it would form a street reaching from the city of New York to the city of Chicago and line both sides of that street. At every 1,400 feet of this charred street of desolation and ruin would be found an injured person caused by the red plague of fire and at every three-quarters of a mile the lifeless body of someone sacrificed to this terrible fire waste. The city of Berlin last year, where they have

met and in a large measure solved the work of conservation of properties, had a fire waste of approximately \$200,000, while Chicago, a city of about equal size in our own State, suffered a fire loss of over \$6,000,000.00. The Collinwood school house, the Boyertown moving picture show, the Iroquois theatre, the Steamer Slocum and the Ash building in New York have claimed in addition to the property burned more than 2,000 lives. When we consider the tremendous amount of property burned each year, the number of lives sacrificed, the great drain upon the financial resources of our State and nation, and the rate of fire premiums paid I believe that this special Department dealing with this special subject can be an agency of great benefit to all of our people and I believe that this Department is entitled to all of the money paid for its support as well as the encouragement of every State, county and city official and the property owners of this State. And I further believe that this Department can be a great agency to conserve and preserve the property of our people and the lives of our people without taxation to them. A reduction of the fire waste means a distinct advantage in the reduction of the fire premiums. To this end I have reason to hope and believe that your recommendations to the Governor will be of such character that he may incorporate in his message the matters and things hereinbefore called to your attention and urge the Legislature to amend this law so as to make this Department in reality a great agency to deal with this important problem of conserving life and property.

The heavy work of investigations and prosecutions together with the great number of convictions under the work of this Department were secured after January 1, 1912. I, therefore, have every reason to believe and anticipate that in the next report of this Department a highly satisfactory condition will obtain.

I cannot help but feel that much credit is due the splendid office force of this Department

and especially the work of the deputies, many of whom were untrained men on the opening of this Department, but who now will compare favorably with the same number of men in any other like Department in any State in the Union.

To the Governor and to you as Insurance Superintendent of Illinois for your watchful and valued assistance since the organization of this Department I acknowledge the sincere appreciation of the Department.

All of which is respectfully submitted.

C. J. DOYLE,

State Fire Marshal.

February 1, 1912.

RESULT OF INVESTIGATION AND PROSECUTION OF
INCENDIARY FIRES IN THE STATE OF ILLINOIS,
OUTSIDE OF THE CITY OF CHICAGO FROM AUGUST
1, 1911, TO DECEMBER 31, 1911.

There have been reported to this office, outside of the city of Chicago, 155 fires of incendiary origin.

Deputies from this Department have investigated and submitted reports from 135 of these fires.

There have been assigned to deputies from this Department 20 fires, the investigation of which has not as yet been completed and reports submitted.

RESULT OF INVESTIGATION.

The following is a summary of the work of this Department of persons charged with incendiarism:

Warrants issued	50
Arrests made	53
Bound over	38
Failure to bind over	6
Indictments	33
Failure to indict	5
Cases tried	12
Convictions	7
Acquittals	5
Confessions of guilt	3
Cases pending	36

CONVICTIONS.

1. William Marshall, Paris, Edgar county, Illinois. Kankakee Asylum, August 16, 1911. Pyromania.

2. Lee Dickens, Mounds, Pulaski county, Illinois. Chester Penitentiary, November 13, 1911. Attempt at arson.

3. Louis Wood Hill, Springfield, Sangamon county, Illinois. County Jail, six months, November, 1911. Conspiracy to commit arson.

4. Ray Betts, Granite City, Madison county, Illinois. Chester Penitentiary, 1/2 years, December 6, 1911. Attempt to commit arson.

5. Steve Michaelleski, Springfield, Sangamon county, Illinois. Sentence suspended on probation, December 16, 1911. Arson.

6. Clarence E. Lee, Mattoon, Coles county, Illinois. County Jail, six months, January, 1912. Arson.

7. Dr. C. A. Handley, Brockton, Edgar county, Illinois. Kankakee Asylum, December 30, 1911. Pyromania.

FUGITIVE FROM JUSTICE.

1. Emory A. Lawrence, Joliet, Will county, Illinois. Arson.

2. Arthur E. Evans, Mattoon, Coles county, Illinois. Arson.

3. Ramsey Patton, Mattoon, Coles county, Illinois. Arson.

ACQUITTALS.

Wright Davis, Peoria, Peoria county, Illinois. Arson.

2. George Metzger, Springfield, Sangamon county, Illinois. Conspiracy to commit arson.

3. Horace Greeley Clements, Springfield, Sangamon county, Illinois. Conspiracy to commit arson.

4. Hugh De'Arcy, Bloomington, McLean county, Illinois. Arson.

5. William Hughes, Granite City, Madison county, Illinois. Attempt to commit arson.

HISTORY OF PROSECUTIONS FROM AUGUST 1, 1911, TO DECEMBER 31, 1911.

The four important classes of incendiarism are:

First—Those who burn to defraud the company carrying insurance on the property;

Second—Those who burn maliciously from spite or envy;

Third—Boys who set fire for mischief, and

Fourth—Pyromaniacs who have an irresistible impulse to burn.

The motives of those convicted during the one-half year were: To defraud insurance companies, three (3); malice or revenge, one (1); mischievous boys, one (1); pyromaniacs, two (2).

TO DEFRAUD INSURANCE COMPANIES.

LOUIS WOOD HILL, SPRINGFIELD, ILLINOIS.

Louis Wood Hill was arrested by Deputy State Fire Marshal A. H. Bogardus, Jr., on the 13th day of May, 1911, and charged with complicity in the fire which damaged the residence of George Metzger, Springfield, Illinois. Wood Hill, Metzger and Horace G. Clements were indicted by the Sangamon county grand jury on a charge of conspiracy to defraud insurance companies and were tried in the circuit court of that county at the November term. Hill turned State's evidence and made a confession implicating Metzger and Clements in this conspiracy and also gave in detail the history of a number of incendiary fires in this section of the State. He came into court and took a plea of guilty and was sentenced to a fine of \$2,000.00. After a trial lasting an entire week, the jury being out thirty hours, Metzger and Clements were found not guilty. They are still under indictment in Sangamon county on other charges connected with this fire.

RAY BETTS, GRANITE CITY, ILLINOIS.

Ray Betts, of Granite City, was arrested August 28, 1911, on a charge of attempt at arson to defraud insurance companies. He was indicted at the October term of the grand jury of Madison county and was brought to trial in the circuit court of Madison county, December 4-6, 1911. The jury returned a verdict of

guilty as charged in the indictment and he was given a fine of \$5.00 and an indeterminate sentence in the Chester Penitentiary of from one to two years. Immediately after the fire Betts left Granite City and went to Ellis, Kansas, where he was apprehended by a deputy from this Department and brought back to Madison county for trial.

CLARENCE E. LEE, MATTOON, ILLINOIS.

Lee was believed to be a member of an active band of fire bugs in Mattoon, Illinois, and was being closely watched and investigated by deputies from the State Fire Marshal Department. In conjunction with two other parties who are now fugitives from justice, Lee shipped some goods from Mattoon, Illinois, to Cape Girardeau, and Jackson, Missouri. A few days after being established in these cities he suffered a loss by fire at each place and on complaint of one of the deputies from the State Fire Marshal Department of Illinois, he was arrested and brought to trial at Jackson, Missouri. Lee made a confession regarding the fire at Cape Girardeau and was given a sentence of six months in the jail on a charge of arson in the fourth degree. He is still under indictment for complicity in the fire at Jackson and will be brought to trial on this indictment at the May term of court. His confederates escaped to Illinois where they were arrested on fugitive warrants pending the arrival of a requisition from the governor of Missouri. They were released on a bond of \$500.00 each which was forfeited and are now fugitives from justice.

FOR MALICE OR REVENGE.

LEE DICKENS, MOUNDS, ILLINOIS.

Dickens was indicted November 13, 1911, on a charge of attempt at arson. He came into court and took a plea of guilty and was sentenced to the penitentiary at Chester of from one to five years.

MISCHIEVOUS BOYS.

STEVE MICHAELSKI, SPRINGFIELD, ILLINOIS.

Steve Michaelski was arrested on December 14, 1911, on a charge of arson. He was charged with maliciously setting fire to and burning a stack of hay belonging to William Kunz, Sr. He was tried before Probate Judge Weaver, December 16th, and found guilty as charged. On account of his youth and from the fact that this was his first offense, sentence was suspended and the prisoner was allowed liberty on probation on the recommendation of the State Fire Marshal Department.

PYROMANIA.

WILLIAM MARSHALL, PARIS, ILLINOIS.

Marshal was arrested on a charge of arson by a deputy from the State Fire Marshal Department, August 16, 1911. With the consent of Deputy Moss he was taken into the county court for a trial as to his sanity. He was adjudged insane and taken to Kankakee asylum, August 17, 1911.

DR. C. A. HANDLEY, BROCKTON, ILLINOIS.

Doctor Handley was arrested on December 29, 1911, on a charge of attempt at arson on complaint of a deputy from the State Fire Marshal Department. Doctor Handley was charged with an attempt to burn property owned by J. E. and H. E. Smith and occupied by Dr. J. P. Hale. He was given a preliminary hearing before F. M. Taylor, police magistrate, and held to the grand jury under a bond of \$2,000.00. Immediately thereafter Doctor Handley voluntarily appeared before County Judge Dayton of Paris, Illinois, for a trial as to his sanity. He was pronounced insane and was committed to the asylum at Kankakee, December 30, 1911.

The following is an account of the prosecution for arson of those persons whose trials

in the circuit court of this State have resulted in acquittals:

George Metzger of Springfield, Sangamon county, Illinois, was accused by the Fire Marshal Department with being implicated with Horace G. Clements and Louis Wood Hill in causing a fire which occurred May 13, 1911. Hill made a confession in which he claimed that he and Clements were hired by Metzger to burn this house so that Metzger could collect the insurance which he had on the property. Metzger was indicted May 24, 1911, and tried in the November term of the circuit court of Sangamon county and the jury after being out thirty hours returned a verdict of not guilty.

Horace G. Clements of Springfield, Sangamon county, Illinois, was indicted May 24, 1911, and tried jointly with Metzger on a charge of conspiracy to defraud insurance companies and the jury returned the same verdict and he was acquitted.

Wright Davis, colored, of Peoria, Peoria county, Illinois, was accused of setting fire to his own house in Peoria and thereby causing the residence occupied by Martin Journey to be destroyed by fire. Journey swore that he saw Davis start the fire and he was arrested on a charge of arson, given a preliminary hearing before Frank Hall, justice of the peace, held to the grand jury on a bond of \$500.00. He was indicted by the grand jury September 22, 1911, and the bond increased to \$2,000.00. He was tried in the November term of the circuit court of Peoria county and the jury returned a verdict of not guilty.

Joseph William Hughes of New Douglas, Madison county, was accused of attempting to burn a saloon and restaurant at New Douglas, Illinois. Car waste, saturated with oil, was used in starting both of these fires. Hughes was seen in the immediate neighborhood just pre-

vious to the fires and very soon thereafter entered his boarding house with his hands all covered with grease. He was suspected of being the guilty party and was arrested September 15, 1911, on a charge of attempt at arson. He was held to the grand jury under a bond of \$600.00 and was indicted by that body at the October term of the circuit court. He was tried in the circuit court of Madison county, December 4, 1911, and was acquitted.

Hugh De'Arcy, Bloomington, McLean county, Illinois, was indicted February 16, 1912, on a charge of arson to defraud insurance companies. He was held under a bond of \$2,000.00. He was brought to trial in the circuit court of McLean county, November 22-23, 1911, and was acquitted.

FUGITIVES FROM JUSTICE—THREE.

EMORY A. LAWRENCE, JOLIET, WILL COUNTY,
ILLINOIS.

Emory A. Lawrence, Joliet, Will county, Illinois, and his wife were both prominent in society circles and had the confidence and esteem of the best people of the city of Joliet. They occupied a large mansion called Good Speed Manor and were enthusiastic collectors of curios and antique furniture. On March 17, 1911, Good Speed Manor was entirely destroyed by fire and Lawrence collected approximately \$10,000.00 from the insurance companies on his loss on household furniture.

After an investigation by deputies from this Department it was found that much of the household goods upon which he had collected insurance including rare pictures, antique furniture and twenty-nine oriental rugs, were in a storage warehouse in the city of Chicago. It was also found that Lawrence had been implicated in several fires in the State of Massachusetts and that he had once served a term of five years in the penitentiary on a charge of arson. He was indicted by the grand jury of

Will county on a charge of arson and conspiracy to defraud, but before a warrant could be served he and his wife fled from the State and have not as yet been apprehended.

ARTHUR E. EVANS AND RAMSEY PATTON. MATTOON, COLES COUNTY, ILLINOIS.

Evans and Patton were members of a band of fire bugs operating in Coles county and were under surveillance by the Fire Marshal Department. They in conjunction with C. E. Lee shipped some household goods to Cape Girardeau county, Missouri. Evans stopped at Cape Girardeau and Patton and Lee went on to Jackson, Missouri, and a few days thereafter each suffered a loss by fire. Deputy State Fire Marshal Moss, acting with the Missouri officers, had Lee arrested at Jackson. Patton and Evans escaped to Illinois and were arrested on fugitive warrants at Mattoon. Both were released on \$500.00 bonds each, which they forfeited and are now fugitives from justice.

The following is a report of the Fire Marshall Department for a period of six months from July 1, 1911, to December 31, 1911. This information is received from officers charged with the duty under the State Fire Marshal Act to furnish the Department with such data as they are able to obtain regarding all fires occurring in their respective city, village, township or county.

NUMBER OF FIRES OUTSIDE THE CITY OF CHICAGO
REPORTED TO THIS DEPARTMENT FROM AUGUST
1, 1911, TO DECEMBER 31, 1911.

	FIRES.
August	318
September	338
October	263
November	410
December	314
Total number of fires	1,643

NUMBER OF FIRES IN THE CITY OF CHICAGO REPORTED TO THIS DEPARTMENT FROM AUGUST 1, 1911, TO DECEMBER 31, 1911.

	FIRES.
August	480
September	239
October	310
November	355
December	290
<hr/>	
Total number of fires	1,674

CLASSIFICATION OF PROPERTY BURNED OUTSIDE THE CITY OF CHICAGO, FROM AUGUST 1, 1911, TO DECEMBER 31, 1911.

Dwellings	759
Barns	390
Stores	116
Hotels	19
Storages	16
Shops	30
Schools	19
Saloons	19
Churches	17
Restaurants	12
Amusement halls	12
Offices	12
Grain elevators	9
Storage warehouses	9
Hay and implements	8
Chicken houses	7
Granaries	6
Garages	6
Automobiles	11
Box cars	6
Steam laundries	4
Corn cribs	4
Oil tanks	3
Depots	2
Commission house	1
Boarding house	1
Not classified	46

Factories	32
Sheds	25
Undertakers establishments	2
Banks	2
Engine rooms	2
Dry houses	2
Pool rooms	2
Ice plant	1
Post office	1
Hospital	1
R. R. Y. M. C. A.	1
Town hall	1
Creamery	1
Packing house	1
Electric plants	2
Mills	2
Bakeries	3
Photo galleries	2
Boat house	1
Horses	1
Slaughter house	1
Evaporators	2
Lumber yards	3
Stanley steamer	1
Wash houses	2
U. S. mail car	1
Smoke house	1
Bowling alley	1
Court house	1
Stock yards	1

Total number of fires 1,643

CLASSIFICATION OF PROPERTY BURNED IN THE CITY
OF CHICAGO FROM AUGUST 1, 1911, TO DECEMBER
31, 1911.

Dwellings	430
Barns	56
Factories	56
Saloons	21
Flats	12
Restaurants	7
Public garages	7

	21
Churches	5
Laundries	4
Storage warehouses	5
Dyers and cleaners	2
Wholesale produce markets	3
Orphans home	1
Electric cars	1
Glue works	1
Various	42
Stores	94
Hotels	50
Sheds	42
Shops	21
Automobiles	12
Box cars	8
Bakeries	6
Picture shows	5
Schools	3
Livery stables	3
Packing houses	2
Club houses	1
Motor cycles	1
Office buildings	1
Ladies' massage parlor	1
Not classified	752

Total number of fires 1,674

NUMBER OF PERSONS KILLED OR INJURED OUTSIDE
OF THE CITY OF CHICAGO FROM AUGUST 1, 1911,
TO DECEMBER 31, 1911.

August	5 killed
September	none reported
October	4 killed
November	1 killed
December	1 killed, 4 injured

NUMBER OF PERSONS KILLED OR INJURED IN THE
CITY OF CHICAGO FROM AUGUST 1, 1911, TO DE-
CEMBER 31, 1911.

August	none reported
September	none reported
October	4 killed, 19 injured

November	none reported
December	none reported

AGGREGATE VALUE OF BUILDINGS AND CONTENTS
SHOWING INSURANCE THEREON AND TOTAL DAM-
AGE BY FIRE OUTSIDE OF THE CITY OF CHICAGO
FROM AUGUST 1, 1911, TO DECEMBER 31, 1911.

Value of buildings	\$5,519,976 00
Damage to buildings	1,430,584 00
Insurance on buildings	3,311,595 00
Value of contents	5,054,374 00
Damage to buildings	1,110,377 00
Insurance on contents	2,682,112 00

AGGREGATE VALUE OF BUILDINGS AND CONTENTS
SHOWING INSURANCE THEREON AND TOTAL DAM-
AGE BY FIRE IN THE CITY OF CHICAGO FROM
AUGUST 1, 1911, TO DECEMBER 31, 1911.

Value of buildings	\$17,419,995 00
Damage to buildings	5,417,160 00
Insurance on buildings	10,553,532 00
Value of contents	8,486,590 00
Damage to contents	873,331 00
Insurance on contents	3,335,115 00

SUMMARY OF THE CAUSES OF FIRES OUTSIDE OF
THE CITY OF CHICAGO FROM AUGUST 1, 1911, TO
DECEMBER 31, 1911.

Unknown	395
Defective flues	172
Caught from sparks	160
Carelessness with matches	68
Adjoining fires	54
Spontaneous combustion	35
Defective pipes	25
Burning rubbish	14
Live coals	11
Overheated smoke houses	4
Films ignited	3
Curtains caught fire	3
Defective bake ovens	3

	23
Short circuit	2
Starting fire with kerosene	2
Electric iron	1
Wood too near stove	1
Fumigating rooms	1
Burning lice	1
Burning pitch	1
Explosion of traction engine	1
Caught from cinders	1
Leak in gas pipe	1
Lightning	261
Incendiary	130
Explosion of oilstoves	105
Overheated furnaces	60
Lamp explosions	37
Electric wires	33
Caught from cigar stubs	13
Caught from stoves	12
Gas jets	7
Tinner's fire box	3
Fired by tramps	3
Caught from candles	4
Saw dust box	2
Caught from salamander	2
Back firing	2
Chips from furnace	1
Friction in dust pan	1
Wreck	1
Mice set fire	1
Burning wasp's nest	1
Caught from tar kettle	1
Caught from oily rags	1
Spark plug ignited	1
Total	1,643

SUMMARY OF THE CAUSES OF FIRES IN THE CITY
OF CHICAGO FROM AUGUST 1, 1911, TO DECEMBER
31, 1911.

Unknown	220
Defective flues	72
Oil stove explosion	36
Caught from sparks	37

Cigar stubs	28
Spontaneous combustion	23
Hot ashes	14
Burning rubbish	7
Thawing frozen pipes	7
Defective spark plugs	5
Back firing	4
Bake ovens	3
Tramps set fire	2
Burning grease	1
Not classified	752
Carelessness with matches	140
Incendiary	39
Gas jets	35
Defective wiring	29
Adjoining fires	31
Gasoline, benzine, gas, etc.	19
Candles on Christmas trees	11
Overheated machinery	7
Lightning	5
Explosions	4
Open grates	3
Clothes too near stove	3
Mice set fire	1
Films	1
<hr/>	
Total	1,674

FINANCIAL STATEMENT.

The following is a recapitulation of the appropriation made by the General Assembly for the maintenance of the State Fire Marshal Department, and the expenditures from the various appropriations hereinafter named from July 1, 1911, to December 31, 1911, to-wit:

Appropriation for deputies, clerks, stenographers, attorneys, etc.:

Amount appropriated—

Emergency appropriation	\$ 3,000 00
Regular appropriation	23,700 00

Total	\$26,700 00
Amount paid out	12,851 69

Balance January 1, 1912	\$13,848 31
-------------------------------	-------------

Appropriation for rent and office expenses:

Emergency appropriation	\$ 2,700 00
Regular appropriation	7,200 00

Total	\$ 9,900 00
Amount paid out	3,141 09

Balance January 1, 1912	\$ 6,758 91
-------------------------------	-------------

Appropriation for traveling expenses:

Emergency appropriation	\$ 4,000 00
Regular appropriation	16,800 00

Total	\$20,800 00
Amount paid out	6,798 30

Balance January 1, 1912	\$14,001 70
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Appropriation for stenographer fees:

Regular appropriation	\$ 2,000 00
Amount paid out	245 65

Balance January 1, 1912	\$ 1,754 35
-------------------------------	-------------

 RECAPITULATION.

Balance appropriation—

Deputies and employés	\$13,848 31
Rent and office expense	6,758 91
Traveling expenses	14,001 70
Stenographers' fees	1,754 35

The principal office of the State Fire Marshal Department of Illinois is maintained at the Capitol building, Springfield, Illinois.

All cases arising in all counties in the State outside the county of Cook are reported direct to the main office at Springfield.

I have also established a branch office of the State Fire Marshal Department in Room 400, American Trust building, 76 West Monroe st., Chicago, Illinois, where all cases arising in Chicago and Cook county are reported direct.

The following comprises the roster of officers and employes under the State Fire Marshal Department:

SPRINGFIELD, ILLINOIS, OFFICE.

C. J. DOYLE,
State Fire Marshal.
 F. R. MORGARIDGE,
Assistant State Fire Marshal.
 W. S. HOOPES,
First Deputy State Fire Marshal.
 MISS MAE SMITH,
Stenographer.
 MISS MARY GORMAN,
Stenographer.
 MISS NELLE SUTTON,
Statistician.
 JOSEPH L. MORGAN,
Janitor.

CHICAGO OFFICE.

A. A. BACH,
Chief Deputy Fire Marshal.
 FRANK L. SALISBURY,
Second Deputy State Marshal.
 NEILS JUUL, JR.
Deputy State Fire Marshal.
 MISS OLIVE M. WILHITE,
Stenographer.

DEPUTY STATE FIRE MARSHALS.

IRA D. ADAMS, Lexington.
 D. N. BLAZER, Aledo.
 A. H. BOGARDUS, JR., Springfield.
 R. B. CONOLLY, Waukegan.
 S. LEGRIED, Centralia.
 H. S. LOVEJOY, Springfield.
 R. B. LYTTON, Metropolis.
 L. C. MCMURTRIE, Lacon.
 HARRY MOSS, Paris.
 JOHN H. RICHARDS, Granite City.
 CHAS. J. ROBERTS, Champaign.
 HENRY J. SLOAN, Danville.

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JUL 8 - 1915

SECOND ANNUAL REPORT

OF THE

STATE FIRE MARSHAL

OF THE

State of Illinois for the Year

1912

By F. R. MORGARIDGE,
Acting State Fire Marshal.



HON. C. J. DOYLE

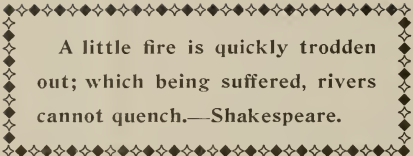
Illinois' first State Fire Marshal. Mr. Doyle organized the department July 1, 1911. He resigned the position June 1, 1912, to become Secretary of State.

HENRY STILLMAN LOVEJOY

BORN APRIL 4, 1863; DIED JANUARY 14, 1912

Mr. Lovejoy was appointed as Deputy State Fire Marshal while Secretary of State Cornelius J. Doyle was State Fire Marshal. He was one of Mr. Doyle's earliest appointees and had charge of a number of the most important cases of this record. He had personal charge of the Cohen and the Swartz cases and one of the last cases upon which he worked was the Banker Jones case at Taylorville. Many cases of importance were entrusted to him not only under the administration of State Fire Marshal Doyle, but also under that of Acting State Fire Marshal F. R. Morgaridge.

He was a brother of Hon. A. J. Lovejoy, of Roscoe, Illinois, a member of the Forty-eighth General Assembly.



A little fire is quickly trodden
out; which being suffered, rivers
cannot quench.—Shakespeare.

SECOND ANNUAL REPORT
DEPARTMENT OF THE STATE FIRE MARSHAL
SPRINGFIELD, ILLINOIS

JANUARY 1, 1913.

Hon. F. W. Potter, Superintendent of Insurance, Springfield, Illinois.

I have the honor to submit to you, in accordance with the requirements of the State Fire Marshal law, the following report of this Department for the year 1912, the same being the second annual report.

The total amount of the reported fire loss for the entire year was \$11,240,540. The total number of fires was 9,092. The average loss on each fire was approximately \$1,237. The sound value of the buildings and contents jeopardized by fire during the year was \$87,967,975. The total insurance involved was \$52,462,701.

Thus it will be seen that the insurance amounted to about 60 per cent of the sound value and that the property loss for the year was approximately 12½ per cent of the sound value.

The total number of dwellings fired during the year was 4,874; barns and garages, 1,159; stores, 801; sheds, 210.

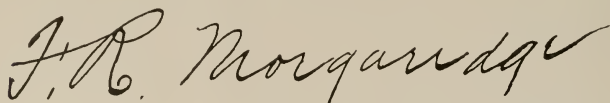
Defective flues and sparks from chimneys caused 1,359 fires; carelessness with matches, 743 fires; overheated stoves, 790 fires; gasoline stoves and gasoline explosions, 522 fires; fires caused by fires in adjoining buildings, 465; lightning, 319 fires. During the year there were 2,304 fires reported to this Department as being of unknown origin.

The average number of fires reported to this Department each day during the year was 25, making a total daily fire waste in the State of \$30,925.

The Federal census of 1910 gives Illinois a population of 5,638,591. The reported fire loss for the State for the year 1912 is \$11,240,540, and although every effort is made to get as complete a report of all the fires throughout the State as possible, I am convinced that a large proportion of the fire loss is not reported, and that could we have complete reports for the entire fire loss it would be much in excess of \$12,000,000. It will thus be seen that the per capita fire loss in the State of Illinois is about \$2.40.

Following you will find a statistical statement of the fires reported to this Department during the year 1912; a record of the investigations, arrests and prosecutions; the bulletins issued during the year, and other data relative to the work of this Department.

All of which is respectfully submitted.

A handwritten signature in cursive script, reading "J. R. Morgannidge". The signature is written in dark ink and is positioned above the printed title.

ACTING STATE FIRE MARSHAL.

STATEMENT

OF THE EXPENDITURES OF THE OFFICE OF THE STATE FIRE MARSHAL FROM
JANUARY 1, 1912, TO DECEMBER 31, 1912.

Appropriation for Deputies, Clerk Hire, Etc.

Balance January 1, 1912	\$13,848 31
Appropriation available July 1, 1912.....	23,700 00
Total	\$37,548 31
Amount expended	25,396 38

Balance January 1, 1913	\$12,151 93
-------------------------------	-------------

Appropriation for Rent and Expenses.

Balance due January 1, 1912	\$ 6,758 91
Appropriation available July 1, 1912	7,200 00
Total	\$13,958 91
Amount expended	5,714.86

Balance January 1, 1913	8,244 05
-------------------------------	----------

Appropriation for Traveling Expenses.

Balance January 1, 1912	\$14,001 70
Appropriation available July 1, 1912	16,800 00
Total	\$30,801 70
Amount expended	11,867 40

Balance January 1, 1913	18,934 30
-------------------------------	-----------

Appropriation for Stenographer Fees.

Balance January 1, 1912	\$ 1,754 35
Appropriation available July 1, 1912	2,000 00
Total	\$ 3,754 35
Amount expended	2,422 07

Balance January 1, 1913	1,332 28
-------------------------------	----------

Recapitulation.

Appropriation for deputies, clerks, etc.....	\$37,548 31
Appropriation for rent and expenses.....	13,958 91
Appropriation for traveling expenses	30,801 70
Appropriation for stenographer fees	3,754 35

Total appropriations	\$86,063 27
Amount expended, appropriation for deputies, etc.	\$25,396 38
Amount expended, appropriation for rent and expenses	5,714 86
Amount expended, appropriation for traveling expenses	11,867 40
Amount expended, appropriation for stenogra- pher's fees	2,422 07

Total expended	45,400 71
----------------------	-----------

Total balance	\$40,662 56
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STATISTICAL STATEMENT

AGGREGATE VALUE OF BUILDINGS AND CONTENTS SHOWING INSURANCE
THEREON AND TOTAL DAMAGE BY FIRE IN THE STATE OF ILLINOIS
JANUARY 1, 1912, TO DECEMBER 31, 1912.

Value of buildings	\$57,483,107
Damage to buildings	6,326,748
Insurance on buildings	35,225,217
Value on contents	30,484,866
Damage to contents	4,913,792
Insurance on contents	17,237,484
Total value of buildings and contents	87,967,973
Total insurance to buildings and contents	52,462,701
<i>Total damage to buildings and contents</i>	<i>11,240,540</i>

AGGREGATE VALUE OF BUILDINGS AND CONTENTS SHOWING INSURANCE
THEREON AND TOTAL DAMAGE BY FIRE OUTSIDE OF THE CITY
CHICAGO FROM JANUARY 1, 1912, TO DECEMBER 31, 1912.

Value of buildings	\$14,359,337
Damage to buildings	4,311,358
Insurance on buildings	8,320,151
Value of contents	7,595,753
Damage to contents	2,628,959
Insurance on contents	2,750,724

AGGREGATE VALUE OF BUILDINGS AND CONTENTS SHOWING INSURANCE
THEREON AND DAMAGE BY FIRE IN THE CITY OF CHICAGO
FROM JANUARY 1, 1912 TO DECEMBER 31, 1912.

Value of buildings	\$43,123,870
Damage to buildings	2,015,390
Insurance on buildings	26,905,066
Value of contents	22,889,113
Damage to contents	2,284,833
Insurance on contents	14,486,760

NUMBER OF FIRES IN THE STATE OF ILLINOIS REPORTED TO THIS DEPARTMENT FROM JANUARY 1, 1912, TO DECEMBER 31, 1912.

January	1324	August	668
February	859	September	712
March	810	October	722
April	547	November	657
May	477	December	969
June	646		
July	701	Total number of fires....	9092

NUMBER OF FIRES OUTSIDE THE CITY OF CHICAGO REPORTED TO THIS DEPARTMENT FROM JANUARY 1, 1912, TO DECEMBER 31, 1912.

January	507	August	442
February	484	September	448
March	457	October	472
April	296	November	403
May	259	December	592
June	391		
July	446	Total number of fires....	5197

NUMBER OF FIRES IN THE CITY OF CHICAGO REPORTED TO THIS DEPARTMENT FROM JANUARY 1, 1912, TO DECEMBER 31, 1912.

January	817	August	226
February	375	September	254
March	353	October	250
April	251	November	254
May	218	December	377
June	255		
July	255	Total number of fires....	3895

INCENDIARY FIRES OUTSIDE THE CITY OF CHICAGO REPORTED TO THIS DEPARTMENT FROM JANUARY 1, 1912, TO DECEMBER 31, 1912.

January	16	August	11
February	42	September	16
March	34	October	24
April	27	November	18
May	16	December	17
June	13		
July	16	Total number of fires....	250

INCENDIARY FIRES IN THE CITY OF CHICAGO REPORTED TO THIS DEPARTMENT FROM JANUARY 1, 1912, TO DECEMBER 31, 1912.

January	24	August	19
February	20	September	21
March	11	October	12
April	17	November	18
May	8	December	15
June	15		
July	18	Total number of fires....	198

INCENDIARY FIRES IN THE STATE OF ILLINOIS REPORTED TO THIS DEPARTMENT FROM JANUARY 1, 1912, TO DECEMBER 31, 1912

January	40	August	30
February	62	September	37
March	45	October	36
April	44	November	36
May	24	December	32
June	28		
July	34	Total number of fires....	448

CLASSIFICATION OF PROPERTY OUTSIDE THE CITY OF CHICAGO REPORTED TO
THIS DEPARTMENT FROM JANUARY 1, 1912, TO DECEMBER 31, 1912.

Awnings	1	Machine	1
Automobiles	9	Machinery	7
Bakeries	9	Meat markets	15
Banks	3	Mine	1
Barber shop	22	Mills	9
Barns	890	Mills, planing	1
Blacksmith shops	8	Mills, saw	3
Boat houses	3	Oil wells	2
Boiler houses	7	Oil derricks	1
Bowling alleys	2	Office buildings	67
Band room	1	Plant, garbage	1
Candy kitchen	2	Pool rooms	5
Camp	1	Public institutions	8
Carpenter shop	2	Photo studios	2
Cars	13	Poultry houses	5
Chicken houses	11	Paint shops	3
Churches	37	Power houses	4
Club houses	4	Printing offices	2
Coal barges	2	Pump houses	5
Coal sheds	2	Restaurants	36
Creameries	6	R. R. stations	1
Depots	11	Rooming houses	11
Drying houses	4	Saloons	36
Dry kilns	2	Sample house	1
Dwellings	2830	Schools	30
Dye houses	8	Sheds	54
Elevators	18	Slaughter houses	4
Electric light plants	3	Smoke houses	22
Engine houses	2	Stock yard	1
Factories	76	Storages	54
Flagman station	1	Stores	555
Fence	1	Shaft	1
Foundries	3	Straw stacks, hay	39
Fan house	1	Servant house	1
Garages	54	Taxi cab, wagon	2
Green houses	3	Tailor shops	2
Grain	1	Tool sheds	9
Granaries	10	Tanks	5
Hand car house	1	Theaters	14
Hotels	50	Wash houses	3
Hospitals	1	Ware houses	14
Jails	2	Wholesale houses	5
Ice houses	11	Viaduct	1
Laundries	13		
Lodge rooms	6		
Lumber yards	9		
		Total number of fires....	5197

CLASSIFICATION OF PROPERTY IN THE CITY OF CHICAGO FROM JANUARY 1
1912, TO DECEMBER 31, 1912.

Automobiles	60	Lumber yards	5
Bakeries	22	Machinery	4
Barber shops	29	Machine shops	3
Barns and garages.....	269	Mill, planing	1
Bath house	1	Office buildings	8
Blacksmith shops	32	Public institutions	13
Boat houses	2	Public halls	5
Breweries	21	Printing offices	3
Cars	19	Packing houses	14
Carpenter shop	1	Photo studios	3
Commission houses	6	Restaurants	49
Churches	13	Railway property	70
Club houses	2	Saloons	65
Coal house	1	Schools	2
Drying houses	4	Sheds	156
Dwellings	2044	Storages	14
Dye houses	9	Stores	346
Elevators	5	Shops	54
Factories	231	Tools	3
Foundries	5	Theaters	22
Fences	2	Wagons	2
Garages	49	Warehouses	31
Hotels	50	Various	117
Hospitals	8		
Hay stacks and grain.....	1		
Laundries	18	Total number of fires....	3895

SUMMARY OF CAUSES OF FIRES OUTSIDE THE CITY OF CHICAGO FROM
JANUARY 1, 1912, TO DECEMBER 31, 1912.

Adjoining	269	Looking for gas leak with	
Ashes against wood	28	match	17
Back fire	2	Matches, carelessness with..	115
Boiler defective	4	Matches	86
Boys set fire	11	Matches, mice with.....	15
Candle, torch, carelessness		Oil, carelessness with	2
with	8	Oily rags	2
Chimney defective	864	Painter's torch	4
Chimney, sparks from	189	Resistance, defective	5
Christmas tree	2	Rubbish burning	37
Clothing too near stove....	2	Saw, sparks from	1
Drunkard set fire	1	Sawdust	1
Dry kiln defective.....	1	Smoke house	1
Drapery too near open		Smoke-stack, spark from...	85
flame	1	Smoker's carelessness	37
Electric wiring	77	Spontaneous combustion ..	137
Fire place, defective	29	Stoves, overheated	244
Engine, spark, stationary..	295	Stove pipe too near wood...	98
Fire works	6	Stove pipe, spark from....	65
Flat iron on wood.....	1	Salamanders	5
Fumigating	7	Soap stone, overheated	2
Furnace	58	Thawing pipes	21
Gas explosion	21	Tramps	7
Gas Jet	8	Tinner's fire pot	1
Gasoline explosion	87	Tank, defective	1
Gasoline stove explosion...	235	Hunter, set fire.....	1
Heating grease, oil, tar....	8	Unknown	1402
Hot box	5	Ventilator	1
Incendiary, suspicious	250	Wrecks	3
Incubator	1		
Kerosene lamp explosion..	25		
Lightning	297	Total..	5197

SUMMARY OF CAUSES OF FIRES IN THE CITY OF CHICAGO REPORTED TO THIS
DEPARTMENT FROM JANUARY 1, 1912, TO DECEMBER 31, 1912.

Adjoining	196	Hot iron	2
Ashes against wood	44	Incendiary and suspicious..	198
Back fire	6	Kerosene lamp, explosion...	16
Bomb explosion	5	Kerosene, stove explosion...	12
Candle, lamp, jets	94	Lightning	22
Chimney, defective	238	Matches, carelessness with..	294
Chimney, spark from	68	Matches, children with.....	232
Christmas tree	11	Matches, mice with.....	1
Clothing too near stove...	2	Resistance, defective	12
Electric motor, defective...	5	Rubbish burning	71
Electric wiring	98	Running fire	369
Engine, railroad spark....	42	Smoke-stack, sparks from..	20
Films caught fire	3	Smoker's carelessness	94
Fire place, defective.....	3	Spontaneous combustion ...	79
Fire works	8	Stove too near wood.....	9
Fumigating	1	Stove pipe, spark from....	29
Furnace, defective	30	Salamanders	5
Gas, explosion	36	Ventilators	1
Gas jet	42	Thawing pipes	262
Gasoline stove, explosion..	33	Tramps	16
Gasoline, benzine, explo- sion	105	Unknown	902
Gasoline engine, explosion.	5	Various	48
Gasoline, stove explosion..	90	Drunkard set fire	1
Heating grease, oil, tar....	5	Boys set fire	27
Hot box	1		
Hot metal near wood.....	1	Total	3895

ARRESTS AND PROSECUTIONS

The following is a summary of the work of this Department for the year 1912 in the investigation and prosecution of persons charged with incendiarism:

Number of incendiary fires reported to this department	448	Indictments	97
Total number of fires investigated	312	Failed to indict	15
Arrests	194	Cases tried	46
Warrants issued	112	Convictions	34
Bound over	35	Acquittals	12
Failed to bind over	17	Confessions	11
		Cases pending	42
		Cases nollied by State's attorney	10

The motives of the 34 persons convicted during the year 1912 were as follows:

To defraud insurance companies	22	Pyromaniacs and insane....	6
Revenge	3	Malicious mischief	3

CONVICTIONS

1. S. F. DARR, Quincy, Adams County, Illinois.
Conspiracy to defraud. Tried January 15-19, Peoria, Illinois. Verdict of guilty. Sentenced to penitentiary for three years. Case appealed.
2. H. A. SIX, Springfield, Sangamon County, Illinois.
Conspiracy to defraud. Tried January 15-19, Peoria, Illinois. Verdict of guilty. Sentenced to penitentiary for three years. Case appealed.
3. LOUIS WOOD HILL, Springfield, Sangamon County, Illinois.
Took plea of guilty at Peoria, Illinois, for conspiracy to defraud. Turned states evidence and was given a county jail sentence for six months.
4. DR. GARRET P. KENNEY, Illiopolis, Sangamoo County, Illinois.
Conspiracy to defraud. Tried February 14, 1912. Took plea of guilty. Placed on probation.
5. WILLIAM SCHWARTZ, Peoria, Peoria County, Illinois.
Burning to defraud. Took plea of guilty. Sentenced to Joliet penitentiary one to ten years.
6. H. A. SIX, Springfield, Sangamon County, Illinois.
Tried at Peoria, Illinois, March 18-23, 1912. Burning to defraud. Verdict of guilty. One to ten years in penitentiary. Case appealed to Supreme Court and remanded for trial.
7. S. F. DARR, Quincy, Adams County, Illinois.
Tried at Peoria, Illinois, March 18-23, 1912. Burning to defraud. Verdict of guilty. One to ten years in penitentiary. Case appealed to Supreme Court and remanded for trial.
8. OWEN TULLY, Rockfoord, Winnebago County, Illinois.
Tried April 25, 1912. Arson. One to twenty years Joliet penitentiary.
9. C. E. LEE, Mattoon, Coles County, Illinois.
Tried at Jackson, Missouri, for arson. Sentenced to penitentiary at Jefferson City for two years. (Illinois Fire Marshal Department investigated case and secured conviction).
10. CHARLES KROUSNOWSKI, Dorisville, Saline County, Illinois.
False pretense. Tried August 20-21. Verdict of guilty. One hundred dollars fine and thirty days in county jail.
11. HENRY T. JENKINS, Jerseyville, Jersey County, Illinois.
Malicious mischief—burning jail. Verdict of guilty. Twenty-five dollars fine and thirty days in jail.
12. GEORGE DROP, Virden, Macoupin County, Illinois.
Malicious mischief—set fire to his house. Plea of guilty. Fined twenty-five dollars.
13. GUS INGRAM, Macomb, McDonough County, Illinois.
Pyromania. Tried January 15, 1912. Committed to Bartonville.
14. MINNIE CRAMER, Danville, Vermilion County, Illinois.
Pyromania. Tried March 28, 1912. Committed to Kankakee.

15. ANTONIO CARMELO alias JOSEPH FRANCO, Chicago, Cook County, Illinois.
Malicious mischief. Arson charge nollied by State's Attorney. Verdict of guilty. Five months in county jail.
16. FRANK BRUNO, Chicago, Cook County, Illinois.
Malicious mischief. Arson charge nollied by State's attorney. Verdict of guilty. Five months in the county jail.
17. VITO PERRIS, *alias* VITO PERSICO, Chicago, Cook County, Illinois.
Arson charge nollied by State's Attorney. Verdict of guilty. Five months in county jail.
18. JOHN SCHMIDT, Belleville, St. Clair County, Illinois.
Pyromania. Tried April 14, 1912. Committed to Anna Asylum.
19. JACOB ROTHSCHILD, East St. Louis, St. Clair County, Illinois.
Obtaining money by false pretense. Took plea of guilty. Fined fifty dollars and costs. Tried September 9, 1912.
20. JANE HARRIS Benton, Franklin County, Illinois.
Burning to defraud. Tried September 10-11, 1912. Verdict of guilty. Committed to Girls' Home at Geneva.
21. ROBERT RUSSEL, Benton, Franklin County, Illinois.
Burning to defraud. Tried September 10-11, 1912. Verdict of guilty. Committed to Chester penitentiary, one to ten years.
22. LORENZO WILKERSON, Benton, Franklin County, Illinois.
Burning to defraud. Tried September 10-11, 1912. Verdict of guilty. Chester penitentiary, one to ten years.
23. WHALLA MISSAVAGE, Royalton, Franklin County, Illinois.
Arson. Tried September 20, 1912. Verdict of guilty. Sentenced to Chester penitentiary, one to twenty years.
24. GEORGE DUGAN, Royalton, Franklin County, Illinois.
Arson. Tried September 20, 1912. Verdict of guilty. Sentenced to Chester penitentiary, one to twenty years.
25. EMIL WEMBLANDT, East St. Louis, St. Clair County, Illinois.
Pyromania. Tried September 23, 1912. Committed to Anna Asylum.
26. GEORGE BERKES, Aurora, Kane County, Illinois.
Malicious destruction of property. Took plea of guilty. Tried October 17, 1912. Fined \$200 and costs. Charge of arson dismissed.
27. TONY CONTRATZKI, Benbow City, Madison County, Illinois.
Malicious destruction of property. Took a plea of guilty. Tried November 1, 1912. Fined \$25.00 and costs amounting to \$87.50. Charge of attempted arson reduced.
28. FRANK L. MILLER, Chicago, Cook County, Illinois.
Pyromania. While under parole started several fires in Chicago. Returned to Joliet penitentiary September 25, 1912, for violation of parole.
29. JAMES MUISIARI, Danville, Vermilion County, Illinois.
Burning to defraud. Tried November 14-17, 1912. Verdict of guilty. Sentenced to Joliet penitentiary, one to ten years.
30. MARY MUSIARI, Danville, Vermilion County, Illinois.
Burning to defraud. Tried November 14-17, 1912. Verdict of guilty. Sentenced to Joliet penitentiary, one to ten years.
31. PETER PORTUESE, Danville, Vermilion County, Illinois.

Burning to defraud. Tried November 14-17, 1912. Verdict of guilty. Sentenced to Joliet penitentiary, one to ten years.

32. ARTHUR E. EVANS, Mattoon, Coles County, Illinois.

Tried at Jackson, Missouri, for arson. Sentenced to penitentiary at Jefferson City for two years. (Illinois Fire Marshal Department investigated case and secured conviction.

33. RUDOLPH BECKER, Chicago, Cook County, Illinois.

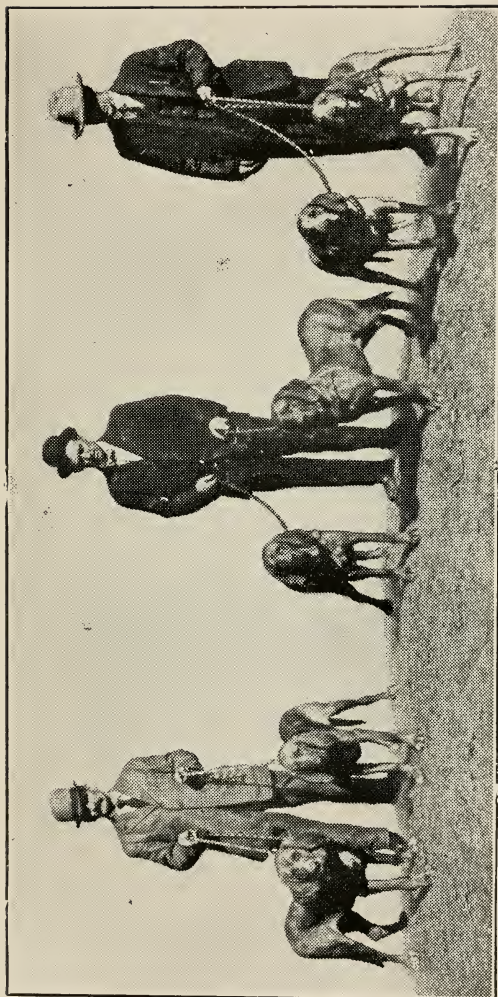
Attempted arson. Took plea of guilty and was paroled to John W. Houston, May 28, 1912.

CONFESSIONS

1. WOOD HILL, Springfield, Sangamon County, Illinois.
2. WILLIAM SCHWARTZ, Peoria, Peoria County, Illinois.
3. C. H. LEE Mattoon, Coles County, Illinois.
4. A. E. EVANS, Mattoon, Coles County, Illinois.
5. JESSE SPENGLER, Hillsboro, Montgomery County Illinois.
6. CHARLES HANNIBAL, Springfield, Sangamon County, Illinois.
7. OWEN TULLY, Rockford, Winnebago County, Illinois.
8. CHRIST F. MESSER, Chicago, Cook County, Illinois.
9. FRANK L. MILLER, Chicago, Cook County, Illinois.
10. MOSE BARTON, Galesburg, Knox County, Illinois.
11. A. E. GOKEL, Alpha, Henry County, Illinois.

ACQUITTALS

1. SAMUEL MILLER, Chicago, Cook County, Illinois.
February 28, 1912. Arson.
2. FRANK CURYLO, Chicago, Cook County, Illinois.
March 22, 1912. Burning to defraud.
3. HARRY and ANNA BUBLIS, Centralia, Marion County, Illinois.
April 24-25, 1912. Burning to defraud.
4. J. P. DARTER, Pinckneyville, Perry County, Illinois.
May 10, 1912. Arson.
6. ANTONIO CALANTRA, Chicago, Cook County, Illinois.
May 17, 1912. Arson.
7. FELIX RANUSCH, Chicago, Cook County, Illinois.
May 19, 1912. Arson.
8. SOL HAMMER, THOMAS CARTON and AL WILKERSON, East St. Louis, St Clair County, Illinois.
June 11-12, 1912. Burning to defraud.
9. MRS. IRENE MCMURTY and HENRY T. DITTO, Mound City, Pulaski County, Illinois.
June 11-12-13, 1912. Burning to defraud.
10. ABE SUSMAN, DuQuoin, Perry County, Illinois.
August 12-13-14, 1912. Burning to defraud.
11. NICHOLAS LENZI and CÆSAR LENZI, Chicago, Cook County, Illinois.
September 28, 1912. Burning to defraud.
12. EMIL PAULET and MINNIE BROCKTON, Chicago, Cook County, Illinois.
November 11, 1912. Arson.



Bloodhounds belonging to Hugh G. Strumpfer, Special Deputy State Fire Marshal, located at Springfield, Illinois. These dogs have been used by the State Fire Marshal's Department in trailing incendiaries with very flattering success.



EMORY A. LAWRENCE

A fugitive from justice, wanted at Joliet, Will County,
Illinois, on a charge of "Burning to Defraud."



LOUIS WOOD HILL

Self-confessed firebug. Pleaded guilty in
Peoria County, January, 1912.

A FEW OF THE "FIRE BUGS" WHO WERE CONVICTED AND SENTENCED TO THE PENITENTIARY BY THE ILLINOIS FIRE MARSHAL DEPARTMENT DURING THE YEAR OF 1912

A SHORT HISTORY OF THE CRIMES FOR WHICH CONVICTIONS WERE OBTAINED DURING THE YEAR 1912

SAMUEL F. DARR, HARVEY AUSTIN SIX AND LOUIS WOOD HILL—*Conspiracy.*

Shortly after the organization of the Fire Marshal Department in July, 1911, it was called upon to investigate a fire which destroyed the Aldine Hotel at Peoria, Illinois, March 17, 1911. After an investigation Darr, Six and Hill were arrested and indicted for "Burning to Defraud" and for "Conspiracy to Defraud." Hill made a confession, turning State's evidence and took a plea of guilty and was given a fine and a county jail sentence. Darr and Six were tried for "Conspiracy to Defraud," January 15, 1912. The jury returned a verdict of guilty and they were sentenced to the penitentiary for a period of three years. They immediately took an appeal of this case to the Appellate Court where the judgment of the lower court was affirmed and it was then carried to the Supreme Court, where it is still pending.

DR. GARRETT KINNEY—*Burning to Defraud.*

Dr. Kinney was arrested in December, 1911, for being implicated in a fire which destroyed his dental parlors at Illiopolis, Illinois. He was charged with setting the fire to prejudice the insurer. He was brought to trial at the February term of court of Sangamon county and took a plea of guilty. This being his first offense and because of extenuating circumstances the circuit judge placed him on probation and paroled him to G. W. Murray, probate officer, for the period of one year.



WILLIAM SCHWARTZ

Peoria, Peoria County, Illinois. Burning to
defraud.

WILLIAM SCHWARTZ—Burning to Defraud.

Schwartz suffered a fire on January 2, 1912, which destroyed his home and household goods. It was found upon investigation that all of his household goods, wearing apparel, etc., had been removed from the house previous to the fire. Schwartz was arrested and indicted and brought to trial at the March term of the circuit court of Peoria county, and sentenced to the Joliet penitentiary for an indeterminate sentence of from one to ten years.

HARVEY AUSTIN SIX AND SAMUEL F. DARR—Burning to Defraud.

After Six and Darr had appealed the case of the People vs. Six and Darr, "Conspiracy to Defraud," they were brought into court at the March term of Peoria county, and tried for "Burning to Defraud" in connection with a fire which destroyed the Aldine Hotel at Peoria, Illinois. The jury rendered a verdict of guilty and they were sentenced to the Joliet penitentiary for an indeterminate sentence of from one to ten years. This case they appealed to the Supreme court and the case was reversed and remanded for re-trial because of the fact that they were indicted and tried for "Burning to Defraud" and the word "Arson" appeared in one of the instructions given to the jury and was regarded by the court as prejudicial to the defendants.



OWEN TULLY

Convicted of arson at Rockford, Winnebago
County, April, 1912.

OWEN TULLY—*Arson.*

Tully was arrested April 3, 1912, for burning a barn in Winnebago county belonging to a man against whom he held a grudge. He was indicted and brought to trial for arson and sentenced to Joliet penitentiary for an indeterminate sentence of from one to twenty years.



CLARENCE E. LEE

Leader of the "Lee Gang," Mattoon, Coles
County, Illinois. Convicted January, 1912.

CLARENCE E. LEE—*Arson.*

Lee was Captain of the so-called "Lee Gang" at Mattoon, a band of incendiaries actively engaged in the business of burning for profit, and was suspected of being implicated in many fires which occurred in Coles county. Late in the year 1911 accompanied by Arthur E. Evans and Ramsey Patton he went to Jackson, Missouri. A deputy from the Illinois Fire Marshal Department followed them there and after a fire, which destroyed the restaurant, Lee was arrested and charged with the crime of "Arson." He was indicted by the grand jury of Cape Girardeau county and convicted at the January term of court. He was sentenced to the penitentiary at Jefferson City, Missouri, for two years.

CHARLES KROUNOWSKI—*Burning to Defraud.*

Krounowski was charged with being responsible for a fire which destroyed his dwelling. It was impossible to find sufficient evidence to bring him trial on charge of "Burning to Defraud" and he was indicted and tried for "obtaining money by false pretense". The jury returned a verdict of guilty and fined him \$100 and thirty days in the county jail.

HENRY T. JENKINS—*Malicious Mischief.*

Jenkins attempted to burn the city jail at Jerseyville, Illinois, while a prisoner therein. He was indicted and prosecuted for malicious destruction of property and fined \$25.00.

GEORGE DROP—*Malicious Mischief*

Drop, while intoxicated, set fire to his dwelling. While in a drunken frenzy he either threw a lighted lamp at his wife or else upset it with the intention of destroying his property which was well insured. He was prosecuted for the malicious destruction of his property and fined \$25.00.

GUS INGRAM—*Pyromania.*

Ingram was tried January 15, 1912, before the probate judge of McDonough county and found to be insane. He was committed to the Bartonville asylum. He attempted to burn his house by hanging clothes over the stove pipe.

MINNIE CRAMER—*Pyromania.*

On March 27, 1912, she made four attempts to burn the property owned by Frank McLean of Danville, Illinois. She was found to be a pyromaniac and was sentenced to the asylum at Kankakee, Illinois.

ANTONIO CARMELO, *alias* JOSEPH FRANCO, AND FRANK BRUNO AND VITO PERRIS *alias* VITO PERSICO—*Burning to Defraud and Arson.*

The above parties were arrested and brought to trial for "Burning to Defraud" in connection with a fire which occurred January 31, 1912. The arson charge was nollied by Assistant State's Attorney Smith and the charge of burning to defraud changed to malicious destruction of property. The defendants were sentenced to the county jail for five months.

JOSEPH SCHMIDT—*Pyromania.*

On April 14, 1912, Schmidt while mentally unbalanced attempted to set fire to his mother's house. He was arrested and found to be of unsound mind and was adjudged a pyromaniac and sentenced to the asylum at Anna, Illinois. Schmidt was sentenced by the probate judge of St. Clair county.

JACOB ROTHCHILD—Obtaining Money by False Pretense.

Rothschild was accused of being responsible for a fire which destroyed his store at East St. Louis. He was indicted on a charge of "attempting to obtain money by false pretense." The case was continued from time to time and when called for trial January 13, 1912, the defendant failed to appear and his bond was declared forfeited. He was found and brought to trial September 9, 1912, and took a plea of guilty and was fined \$500.00 and costs.



ROBERT RUSSELL

Convicted at Benton, Franklin County, Illinois, for burning to defraud, September, 1912.



LORENZO WILKERSON

Convicted at Benton, Franklin County, Illinois, for burning to defraud, September, 1912.

JANE HARRIS, ROBERT RUSSELL, AND LORENZO WILKERSON—

Burning to Defraud.

The above parties were accused of being responsible for a fire which destroyed a dwelling occupied by them for the purpose of collecting money from the insurance companies. They were brought to trial at the September term of the Franklin county circuit court on September 10 and 11, 1912, charged with "Burning to Defraud." The jury returned a verdict of guilty. Russell and Wilkerson were sent to the Chester penitentiary for an indeterminate sentence of from one to ten years. Jane Harris, although twenty-six years of age was found by the jury to be but seventeen because they were opposed to sending her to Joliet penitentiary and she was sentenced to the State institution for wayward girls, at Geneva, Illinois.



WHALLA MISSAVAGE

Royalton, Franklin County, Illinois. Convicted in September, 1912, for arson.



GEORGE DUGAN

Royalton, Franklin County, Illinois. Arson. September, 1912.

WHALLA MISSAVAGE AND GEORGE DUGAN—*Arson.*

Missavage was proprietor of a saloon at Royalton, Illinois, and it was charged that he had hired Dugan to burn out a rival saloon so that he might have a monopoly of the business in that town. The case was brought to trial at the September term of the Franklin county circuit court on September 20, 1912. The jury returned a verdict of guilty and they were both sentenced to the Chester penitentiary for an indeterminate sentence of from one to twenty years.

EMIL WEMBLANDT—*Pyromania.*

Wembrandt was arrested July 15, 1912, for attempting to burn the home of his mother at East St. Louis, Illinois. He was tried in the circuit court of St. Clair county on September 23, 1912. The judge found him to be of unsound mind and adjudged him a pyromaniac and he was committed to the asylum at Anna, Illinois.

GEORGE BECKES—*Burning to Defraud.*

Beckes was the proprietor of a cleaning and dying establishment at Aurora, Illinois. He made two attempts to destroy the place by fire for the purpose of collecting on his insurance policy. He was arrested and indicted for "Burning to Defraud." Because of the fact that he had always borne an excellent reputation and that this was his first offense and because of the further fact that he made a confession and was evidently influenced by a former partner the charge was reduced to that of malicious destruction of property. Beckes took a plea of guilty and was fined \$200.00 and costs.

TONY CONRATZI, *alias* JOHN KIRTZ—*Malicious Mischief*.

Conratzi, alias Kirtz, was arrested August 12, 1912, for attempted arson. Conratzi attempted to burn the city jail at Benbow City, Illinois, in order to affect his liberty. He was prosecuted for malicious destruction of property and was fined to the amount of \$87.50.



FRANK L. MILLER
Chicago, Cook County, Illinois.

FRANK L. MILLER—*Arson*

Miller was a paroled convict from the Joliet penitentiary. He was convicted in 1902 for setting a fire in which a man was burned to death. He was sentenced to the Joliet penitentiary for this offense. On August 29, 1912, he was paroled. Between August 29 and September 20, when he was arrested, he set fire to a number of buildings and box cars in the city of Chicago. He confessed to an irresistible impulse to start fires and is evidently a pyromaniac. He was returned to Joliet for violating his parole.

JAMES MUSIARI, MARY MUSIARI AND PETER PORTUESE—*Burning to Defraud*.

The above parties were arrested October 11, 1912, on a charge of "Burning to Defraud." They were brought to trial November 14-17, 1912, and the jury returned a verdict of guilty and they were sentenced to the Joliet penitentiary for an indeterminate sentence of from one to ten years.



A. E. EVANS, *alias* A. E. SUMMERS
Fire-bug who operated in Mattoon, Coles
County, Illinois.

ARTHUR E. EVANS—*Arson.*

Evans was one of the men who accompanied Lee to Missouri early in the year 1912, and was responsible for two or three fires at Jackson, Missouri. He was located by a deputy state fire marshal, arrested and taken to Missouri together with a number of witnesses from Illinois for trial. He was indicted by the December term of the circuit court and was tried and found guilty. He was sentenced to the penitentiary for a term of two years.

RUDOLPH BECKER—*Arson.*

Becker was arrested at Chicago, Illinois, May 19, 1912. He took a plea of guilty and was placed on probation. He was paroled to J. W. Houston on May 28, 1912.



LEE DICKENS

Alias Big Boy, sentenced from Massac
County for arson.



Corn Products Refining Company fire at Waukegan, Illinois, November 24, in which fourteen employees were fatally burned.

DEATHS BY FIRE

The following is a summary of the number of persons who have met accidental death through the agency of fire in the State of Illinois

Total number of persons burned to death.....	308
Total number in Cook county	134
Total number outside Cook county.....	174

CAUSES

Clothes catching fire from stove	22
Gas explosion	20
Playing with fire	17
Gasoline explosion	29
Carelessness with matches	20
Lighting fire with kerosene and kerosene explosions.....	25
Playing around bonfire	23
Burned in burning building	33
Explosion and fire in Corn Products Refining Company.....	14
Miscellaneous and cause not reported	105

The following is a partial list of those persons who were burned to death in the State during the year 1912. This list is not complete because of the fact that in many instances the names and causes of the deaths were not reported to this Department. I am of the opinion that had we accurate reports from the entire State the list of accidental deaths by fire would have been close to 400, because in many instances where persons have been reported as seriously burned they afterwards died from the effects of those burns.

COOK COUNTY

MONTH OF JANUARY

4. Bessie Sabota, clothing ignited from a candle.
6. Kuzma Alifarchik, gas explosion.
8. Mary Seafuse, clothing caught fire from cook stove.
8. Julia Bemaner, accidentally burned to death.
9. Josephine Meudzuisak, starting fire with kerosene.
10. Stephenna Les, clothing caught from cook stove.
10. Katherine Sadville, clothing caught fire from a match.
11. Adeline Frances Budziak, gasoline explosion.
12. H. H. Richards, caught on burning building.
12. Mary Alice M. Givorn, clothing ignited from gas log.
16. Nellie McKenzie, burns received in the home.
17. Mable M. Lichtenburg, dress catching fire from open grate.
18. Francis Zozgomek, caught from open grate.
18. Veronica Beranek, playing with matches.

19. Mary Sabransky, starting fire with kerosene.
19. Lizzie Floyd, oil stove explosion.
19. Edward Kumm, playing with matches.
24. Violet Judzika, clothing catching from a cook stove.
26. Rose Grybos, lighting fire with kerosene.
27. John La France, explosion of cleaning fluid.
30. Rose Nuzia, clothing caught from matches.

MONTH OF FEBRUARY

1. Emma Bitner, clothing caught fire from matches.
2. Thomas Wise, kerosene explosion.
12. Annie Endrouzha, clothing caught fire from gasoline.
21. Catherine Huskin, clothing caught fire from matches.
28. Mary V. Bender, clothing caught fire from matches.

MONTH OF MARCH

1. Paul Leknochkis, clothing caught fire from kitchen stove.
4. Edward Keer, burned in burning building.
4. John Collins, burned in burning building.
4. Leon Francis Gisenot, burned in burning building.
4. J. Mattsin, burned in burning building.
6. Mary A. Whiting, died from burns received in burning house.
9. Elëssa Wilson, starting fires with kerosene.
9. Elizebeth M. Sculby, playing with a burning stick.
11. William McFarland, clothing caught from kitchen stove.
13. Rose McCawel, caught from coal oil stove.
13. Ferdinand Heeruagin, clothing ignited from heating stove.
14. Ethel Gallup, clothing ignited from lighted paper.
15. Katie Pfannes, mother pouring gasoline on kitchen fire.
18. Abraham Ouzoonion, gasoline explosion.
20. Viola Wiglarg, putting paper in stove, igniting her clothing.
23. Fredericka Zahn, clothing ignited from gas stove.
26. George Evily, explosion.
26. Frank Peck, explosion in a foundry.
28. Katie Schmidt, clothing ignited from burning paper.
29. Donald Campbell, attempting to light gas stove.

MONTH OF APRIL

1. Mary Cooper, alcohol lamp exploded.
1. Minerva Bell, gas explosion igniting clothing.
4. Elizabeth Pfanner, starting fire with gasoline.
11. Annie Sykona, burned to death in burning building.
12. Jacob Koloszinski, gas explosion.
15. William Rothingass, gas explosion.
16. Margaret Kelbinger, clothing igniting from match.
20. Mrs. William H. Seifried, clothing caught fire.
24. Joe Batho, explosion.

MONTH OF MAY

1. Annie V. Gettleson, clothing ignited from stove.
7. Stanley Jassaetn, playing with matches.
12. Clarence Perry, filling gasoline tank of automobile.
12. Thomas Etehnighan, clothing ignited from bonfire.
24. Pearl Hart, jumping through bonfire.
25. Nathan Greenburg, playing with matches.
26. Thomas A. Lockie, playing with bonfire.
29. Stofani Sitka, benzine explosion.

MONTH OF JUNE

1. Julian Dina, clothing set on fire in unknown manner.
5. Ernest Lange, playing around bonfire.
16. Antonia Chamalis, clothing caught fire from unknown cause.
17. Ida Finkelstein, clothing caught fire from gas stove.
18. Thankful B. Bullock, clothing ignited from gas stove.
26. Sine Orterburg, playing with matches.
28. John Sandaker, playing around bonfire.
29. Ganie Gliel, clothing caught fire from stove.
29. Herbert Kirsch, playing around bonfire.
30. Edna Muller, playing around bonfire.
30. Jerome S. Aschennann, playing around bonfire.

MONTH OF JULY

4. Catherine Mulqueen, clothing caught fire from gas stove.
5. Joran Letmolee, clothing ignited from gas stove.
12. Isabella A. Waves, clothing ignited from stove.
15. Luella A. Magnuson, clothing ignited from candle.
17. Paul Hanet, playing around bonfire.

MONTH OF AUGUST

2. Mary Haybecker, clothing caught fire from unknown cause.
4. Edward Gausselin, playing with lighted candle.
20. Rose Perello, kerosene explosion.
24. Catherine Hart, striking matches near gasoline.

MONTH OF SEPTEMBER

3. Julius Salkin, explosion.
6. Kate Rademacher, gasoline stove explosion.
8. Mary Pawlouski, clothing caught fire from a lighted match.
9. Morris Scheffner, explosion.
11. Anna Novinee, playing with bonfire.
13. Irene Koch, playing around bonfire.
16. Henry Schuman, playing around bonfire.
20. Lillian Johnson, playing around bonfire.
22. Theresa Kardosy, burned in home, cause unknown.
24. Frank Lanzone, playing with matches.
24. Howard W. Hedges, playing around bonfire.
26. Hans Hansen, clothing ignited from unknown cause.
27. Tine Hommes, playing with matches.

MONTH OF OCTOBER

5. Mary Kaplan, benzine explosion.
6. William Edward Humings, playing around bonfire.
6. William Edward Humings, playing around bonfire.
6. Elizabeth L. McDermont, playing around gas plate.
7. Catharine Bryan, starting fire with benzine.
25. Ellen McGoven, clothing ignited from kitchen stove.
25. Winifred Balder, clothing ignited while burning leaves.

MONTH OF NOVEMBER

3. Hugh O'Brien, gasoline explosion.
4. Celia Tubin, burned in burning building.
9. Oscar Krueger, playing with matches.
11. Mary Kamradthke, clothing ignited from unknown cause.
14. Chester G. Bertgstran, burns received in fire at home.
16. Martin E. Bently, burns received in fire.
19. Mary Winewski, clothing caught while playing with matches.
25. Christina Lutzen, burns received in lighting fire.
27. Anna Kozak, playing around a bonfire.
28. Anna Covey, clothing caught fire.
30. R. McDonald, accidently set fire to self.

MONTH OF DECEMBER

1. Carl Antrum, burned while asleep on Steamer Flora.
6. Joseph Deabick, kerosene can exploded.
7. Stefan Nemea, kerosene can exploded.
11. Vivian Reynolds, clothing caught fire while playing.
10. Gustauder Spienggu, burns received at her home.
16. Fredrich Groh, clothes caught fire in store.
16. Aggress Majaar, playing with matches.
19. George Hyson, clothing caught fire while riding on dead engine.
24. F. U. Fazzino, clothes caught fire from kitchen stove.
26. Patrick Jayce, bed clothes caught fire.
26. Emma Kadel, kerosene explosion.
27. Tresa Burian, clothing caught fire while playing.
27. Josephen Despenzel, burned while playing.
29. William Seiforth, scalded by explosion on Belt Line Railroad.
29. Henry Krone, suffocated by burning mattress.
30. John Klein, gas explosion.
30. Rose Klein, gas explosion.
30. Charles Nehoffer, gas explosion.
30. Valenta Cohn, gasoline explosion.

OUTSIDE OF COOK COUNTY

Caroline Harris, (colored) clothing ignited from heating stove.
E. W. Fleaner and wife, (colored) burned in burning building.
Mrs. Anne Mank, burned in burning building.
Ellen Cullenens, burned in burning house.
Albert Decker, burned to death in burning building.

John Tohill, died from burns received in burning dwelling.
 Susan Tohill, died from burns received in burning dwelling.
 Mrs. John Fry, burned in burning building.
 Howard Maxwell, burned in burning building.
 Mrs. Henry Jannssen, burned in burning building.
 Mrs. Ann Mauk, lamp explosion.
 James Trimble, burned in burning building.
 Lucille Werham, burned in burning building.
 Joe Segner, burned in sleeping car.
 Tony Petroff, burned in burning building.
 Pete Christoff, burned in burning building.
 Dimetroff Gerogoff, burned in burning building.
 D. C. Robertson, burned in burning barn.
 Henry Paterson, burned in burning building.
 Ellen Renner, burned in burning building.
 Mary House, dress caught in bonfire.
 William Coy, clothes caught from bonfire.
 W. Carcey, burned in burning building.
 Peter Daugiela, explosion Corn Products Refining Co., Waukegan.
 Frank Stanley " " " " "
 J. Adams " " " " "
 Mike Punch " " " " "
 Martin Manichunk " " " " "
 Louis Moenotich " " " " "
 Marcus Slater " " " " "
 Frank Trobitz " " " " "
 Joe Zelelek " " " " "
 Joe Chezenoski " " " " "
 Charles Tamalis " " " " "
 John Carolins " " " " "
 Joe Kowalski " " " " "
 Alex Oblick " " " " "
 William H. Adams, steam pipe bursting.
 Catherine Suttos, lighting fire with gasoline.
 Mary Monaie, burned in burning building.
 May Edith Herrmann, clothes caught fire.
 John Tyshak, burned in burning building.
 Peter P. Pedeynna, burned in burning building.
 Donald Bun, burns received while playing around stove.
 Maud Sowatt, lighting fire with kerosene.
 Baby Tant, clothes ignited.
 Mrs. Harriet Highley, gasoline explosion.
 Mrs. Martin Dudlinger, cause unknown.
 Nancy McQuality, burns inflicted with suicidal intent.
 Harry Arnold, gasoline explosion.
 W. E. Peters, explosion of engine.
 D. R. Fetrow, gasoline explosion.
 Carl Adler, burns sustained by stepping into a carload of cinders.
 Henry Scott, clothes ignited from base burner.
 Lucy Scott, burns received as a result of fire caused by base burner.
 Baby Wedrosky, burned to death, cause unknown.
 William Barton, burned in burning building.

William Bartholomew, burned in burning building.
Baby Beggs, burned to death, cause unknown.
Mary Fisher, burned in burning building.
Mrs John Gray, clothing ignited from paper in stove.
Mrs. Laura Alexander, clothing ignited from overheated stove.
Themla Bridges, cause unknown.
Eugene Mullens, burned in burning building.
Fred Tonn, gasoline explosion.
Mae Finnegan, gasoline explosion.
Agnes Hayes, gasoline explosion.
Carrie Taylor, matches.
George Jackson, burned to death in a barn.
Madaline Erring, burned to death from bonfire.
Mrs. Mary Rose, cause unknown.
William Copeland, burned in burning building.
Robert Bolls, burned in burning building.
George Grady, burned in burning building.
Miss Jessie Dinsmore, burned in burning building.
Baby Kamp, burned to death, cause unknown.
August Posatera, burned in burning building.
Samuel Williamson, burned in burning cattle car.
Thomas Adams, burned in cattle barn.
Virgil Given, playing with matches.
Mrs. Sarah E. Kilgan, fell into open fire place.
George Duvall, wife and child, explosion of gas.
Martin Los Kaski, explosion in mine.
Charles Yuraitis, burned in burning house.
Susie Topocik, playing around bonfire.
Drennan Dale Clutter, lighting matches in bed.
Joseph Hamali, coal oil explosion.
Thelma R. Olds, carelessness.
Mary Stangus, bonfire caught clothing.
Charles Andrews, lamp explosion.
Daniel Haskill, burned in burning building.
Margaret Brooks, burned in burning building.
Scott Campbell, burned in burning building.
Cornelius Wuest, burned in burning building.
Mrs. Eulalie Scarberry, burned in burning dwelling.
Christi Corker, burned in burning dwelling.
Mrs. Harley McBride, burned in burning building.
Leona Gibroy, kerosene explosion.
Lillian Corell, lamp explosion.
Francis Leonard, burned to death in burning building.
Mrs. John Zarick, burned in burning dwelling.
Mrs. Chester Chafman, kerosene explosion.
Unknown persons, 68.

BULLETINS ISSUED DURING THE YEAR 1912
TO THE PUBLIC SCHOOL TEACHERS
OF THE STATE OF ILLINOIS

Greetings:

It is with a great deal of pleasure that we call your attention to the fact that our Governor, Charles S. Deneen, has issued a proclamation setting aside Wednesday, October 9, as "Fire Prevention Day," a day upon which we are to focus attention on the enormous fire waste in this State.

It is estimated that approximately \$500,000,000 is annually expended by the people of the United States for the loss of property by fire and for the cost of fire prevention. The fire loss in the State of Illinois for the year 1912 will amount to over \$10,000,000 and we believe 60 per cent of this loss is due directly to carelessness.

We believe that no great and lasting results can be obtained in the matter of fire prevention until it is taken up where all great educational matter must be started, namely, in the public schools. And we further believe that a course in fire prevention should be one of the most important in the curriculum of the schools today.

A child should be acquainted with the results of fire and with the methods of handling one when it is started, and above all with the means of preventing it. Twenty-six states and two territories in the United States and Canada have passed fire marshal laws and at least two states have laws making it compulsory to instruct the children of the public schools on these topics of Fire Waste and Prevention. We recommend that simple methods of fire prevention and rescue work be taught to the pupils under your instruction and that fire drills be instituted in your school and practiced at frequent intervals.

Our State has experienced some very disastrous fires, among which are the great Chicago fire of 1871 and the Iroquois Theater fire, in which a number of children perished. We recommend that some of the older pupils write compositions on the above fires and read them during the exercises of Fire Prevention Day. We hope that due preparation will be given to this program, as this is a subject that deserves the serious consideration of all intelligent people.

You will find in this little booklet a copy of the Governor's proclamation, a short suggestive program which is appropriate for the exercises of the day, and a few selections of poetry which are also appropriate for the occasion.

With best wishes for yourself and your pupils and hoping that you will observe Fire Prevention Day in manner befitting the occasion.

Very truly yours,

F. R. MORGARIDGE.

STATE OF ILLINOIS
EXECUTIVE DEPARTMENT
PROCLAMATION BY THE GOVERNOR

AUGUST 30, 1912.

Chief among the great conservation problems which call upon our State for solution, none can be more important than that presented by present conditions in the matter of waste of the energy and resources of our State and Nation through destruction by fire. Commendable as is the movement to conserve our natural resources I am impressed also with the great necessity of conserving the properties of our people. Our natural resources merely awaited the discoverer. Our builded properties represent time and money and energy and every one of these buildings destroyed through the agency of the red plague of fire is an irretrievable loss to the community at large.

Between 1901 and 1910 the per capita loss through fire in the United States was \$2.71 as compared to the total European per capita loss during the same period of 33 cents and the German per capita loss of 19 cents. Between 1900 and 1910 the population of the United States increased 73 per cent while the fire loss increased 134 per cent. Illinois and her citizens suffered a loss of property by fire last year of approximately \$11,000,000. This loss increased the burden of taxation directly to the property owners who insure and, indirectly to the people at large in the loss of taxes on the property burned. It was a tremendous drain upon the resources of our State. In contrasting the conditions in continental Europe, with their laws regulating the construction and protection of building and the general work of fire prevention, with the conditions in this country it appears that 50 per cent of the fire waste in Illinois and the nation is preventable. This \$5,500,000 should be saved to the people of this State by arousing the public mind into action in a concerted effort to minimize the causes of carelessness, ignorance and arson which have brought about prevailing conditions within our State.

Greater even than the loss of property is the tremendous loss of life through the agency of fire. More than 5,000 lives were lost, according to the statistics, by fire last year in the United States and Canada. The citizenship of our State should unite to conserve the property of our people as we conserve the health and lives of the people of this State.

To this end, therefore, it is most earnestly recommended that Wednesday the

NINTH DAY OF OCTOBER, 1912,

which is the forty-first anniversary of the great Chicago fire, be set aside and be known throughout the State of Illinois as

FIRE PREVENTION DAY,

that on said day all owners of property shall take steps to see that

their buildings be thoroughly inspected for the purpose of discovery and removal of dangerous conditions therein; that the civic authorities concerned in the prevention of fires take steps to call the attention of the people of their community of the common fire dangers and coöperate with them in every possible way in correcting dangerous conditions and that our school authorities, both public and private, shall on the above day conduct such appropriate exercises as will impress upon the pupils of our schools the danger of fire and the methods of its prevention and, that in every school in this State a fire drill shall that day be inaugurated and that these fire drills be made a permanent feature and practiced at frequent intervals through the school year.

In testimony whereof I have hereunto subscribed my name and caused the great seal of the State of Illinois to be affixed at the Capitol, in the city of Springfield, this thirtieth day of August, A. D. 1912.

CHARLES S. DENEEN, *Governor.*

By the Governor:

C. J. DOYLE, *Secretary of State.*

TO SUPERINTENDENTS AND TEACHERS

Can anything be done to make the pupils see the great waste of life and property due to fire? Can we interest them in fire preventing and fire fighting methods? It is often charged that the school and its teachings fail to touch the real things of life and to prepare its pupils for taking an intelligent, active part in practical affairs. Certainly, anything we do to arouse an interest in this great subject; to beget habits of caution and care in the handling and use of fire producing materials; to create a feeling of personal responsibility in preventing or reducing the losses in life and property by fire,—certainly, this will be practical and will relate our teachings to a very important affair in actual life.

The State Fire Marshal has agreed to prepare a circular containing interesting and trustworthy information on fire losses and fire prevention. This circular is intended to supply superintendents and teachers with subjects and materials for preparing a Fire Prevention program. It seems wise to set aside a special day for such a program. I, therefore, suggest that the first Friday afternoon in December of each year shall hereafter be set apart as Fire Prevention Day in the public schools of Illinois and that appropriate exercises be given on that day.

F. G. BLAIR,

Superintendent of Public Instruction.

SUGGESTIVE PROGRAM

FOR PUBLIC SCHOOLS IN OBSERVANCE OF FIRE PREVENTION DAY

1. Opening Song—"America."
2. Reading of the Governor's "Proclamation."
3. Essay—"Some Fires I've Seen."
4. Recitation—"The Fire Brigade."
5. Composition—"The Chicago Fire of 1871."

6. Composition—"The Iroquois Theater Fire."
7. Song—"Fire Song."
8. Recitation—"Engine No. 8."
9. Composition—"The Collinwood School Fire."
10. Essay—"Fire Waste and How to Prevent It."
11. Recitation—"The Fireman's Story."
12. Closing Song—"Illinois."

N. B.—Much information of value in preparing the above program can be obtained from a book entitled "Firebrands," which should be in all school libraries.

WHAT TO DO IN CASE OF FIRE

In case of fire it is necessary above all things to "keep cool." Try not to get excited, and so waste precious moments in running about to no purpose. Act quickly, but keep your mind on what you are doing.

If it is only a little blaze, throw water on the thing that is burning, try to smother the flames with a heavy rug, or beat them out with a wet broom. If oil is burning, never pour on water, as this only spreads the oil and makes matters worse. For an oil fire use sand, earth from flower-pots, or big panfuls of flour.

If you leave the house to summon help, be sure to *Close the door*. Fresh air makes the flames burn faster, and spread more rapidly. If the fire is one room, try to keep it there by closing the doors and windows. If it is in the closet, shut the door until you can get help. In this way you may save the whole house from burning.

FIRST AID TO BURNED

More than 6,000 people are burned to death every year in the United States and many times that number are badly burned.

A child with clothing afire should not run or scream. Running fans the flames and screaming takes deep breaths which draw the heat of the flames into the chest.

To put out the fire, quickly wrap yourself up in some woollen or heavy material and roll upon the floor. Nearly always, one can get at once a coat or shawl or rug, or bed or lounge cover, or portiere. One can help one's self better in this way than by using water, which quickly runs off.

Any one seeing a person's clothing afire should wrap and roll him. The one who is afire usually has to be thrown down. This must be done to put out the blaze by the rolling and to keep him from breathing flame.

To stop the pain from such a burn the air must be kept away from it. Lint or cotton wetted from a pint of water into which a teaspoonful of baking soda has been stirred, should be put over the burn and held by a bandage. If there is no soda use sweet oil or molasses. Many mothers use scrapings from a potato. If a burn of this kind covers a large part of the body it is dangerous and a doctor should be sent for.

DANGERS OF GASOLINE

Every week there are at least twenty persons burned to death by the careless use of gasoline, and three times as many dangerously burned. Gasoline burns are so deep that they leave ugly scars.

Every day some house is set afire by the careless use of gasoline. Usually the fire department arrives in time to prevent the house from burning down but the loss from such fires is more than \$3,000,000 in a year. Gasoline is the most dangerous part of petroleum. Naptha is only a little less dangerous and is usually called gasoline.

Gasoline gives off vapor all the time. When eleven-twelfths of a room is filled with air and one-twelfth of it is filled with gasoline vapor there is greater danger than if the room was filled with gunpowder. Air with that much gasoline vapor is heavier than air and it falls to the floor and is very explosive and much more powerful than gunpowder.

When people clean the grease from leather, wool and silk they often use gasoline which melts the grease and carries it away.

Gasoline should never be used for cleaning (or anything else) in a room where there is a candle, lamp or fire. A lighted cigar or pipe carried into a room in which gasoline is being used will explode the air in it.

Gasoline vapor is frequently ignited and serious explosions caused by a spark or frictional electricity caused by rubbing silk in dresses, ribbons or gloves together which are being washed in gasoline.

RULES FOR THE USE OF KEROSENE

Always keep kerosene in a metal can.

Always keep the can tightly closed, and keep it as far from the stove as possible.

Never use kerosene to light a fire.

Never, never use it to start up a slow fire.

You will probably set yourself or the house on fire if you do.

Fill all the lamps and oil-stoves by day-light. If you must fill them after dark, never do so while they are lighted. The flame in the lamp might set fire to the kerosene vapor in the air, and this in turn ignite oil. If the fire runs up the stream of oil into the can, the can will explode.

Remember that the three most dangerous things in the world for setting fires, are *kerosene*, *gasoline*, and *matches*.

INSPECTION DIVISION
STATE FIRE MARSHAL DEPARTMENT
SPRINGFIELD, ILLINOIS

HOLIDAY DECORATIONS

CAUTION. There is considerable danger to life and property from Christmas displays, decorations, signs, etc., in churches, public buildings, mercantile establishments, and especially in department stores.

The use of Christmas greens, harvest specimens and other inflammable materials, such as scenery, cotton to represent snow, and the like, (especially in connection with electric and other lighting systems), is a decided increase of fire hazard, it being impossible to make displays of this kind perfectly safe. It is possible to obtain fireproofed decorations which will eliminate the danger to a considerable extent provided sufficient care has been exercised in thoroughly covering the material with the fireproofing compound.

Electrical wiring and apparatus used in this connection should be well installed as if it were to be permanent and should be carefully inspected by one familiar with the subject before the current is allowed to be turned on. The custom of wrapping incandescent lamp globes with cotton, cheese cloth, etc., or even allowing inflammable materials of this kind in close proximity to such lamps, is extremely dangerous and should be discouraged.

NOTE.—None of the "Christmas Tree Lighting Outfits," consisting of a number of miniature lamps attached to flexible cord, or flexible cord work, are approved for general decoration purposes, nor for use in show windows, etc.

Insurance companies in assuming the risk, at ordinary rates, do not contemplate any such unusual increase in fire hazard as the extraordinary use of highly combustible material and extensive additions to electric lighting systems often found at this season.

Most rigid safeguards against fire should be used in connection with any special displays and additional fire protection provided in the immediate vicinity. Special watchmen or firemen should be detailed to watch places where these displays are installed, not only to prevent spread of fire to avoid panics, which are almost sure to result from any fire starting where a considerable number of people are gathered together.

W. S. HOOPES,
First Deputy.

F. R. MORGARIDGE,
Acting Marshal.

ADDRESS OF CORNELIUS J. DOYLE, ILLINOIS STATE FIRE MARSHAL, DELIVERED BEFORE THE COMMERCIAL CLUB OF EL PASO, ILLINOIS, NOVEMBER 2, 1912.

Mr. Toastmaster, Ladies and Gentlemen:—

I assure you that it is a great pleasure as well as a great privilege for me of having this opportunity of being with you tonight and presenting, as best I can, the relation of the State Fire Marshal's office to the reduction of the fire waste and other fire problems in the State of Illinois. It is true, as your chairman has stated, that the Governor on the first day of July last, appointed your speaker to the office of State Fire Marshal. It is a new department in this State and I happen to be, therefore, the first State Fire Marshal. Over at East St. Louis the other night the chairman of the meeting, a smart Irishman, introduced me as the "best" Fire Marshal that Illinois ever had. He also said, among other things, that he hoped when the record of my term of office was made up, and even when the hour of the last shall have come and the friends have gathered around because my earthly career was closed, some thoughtful friend would inscribe this sort of an epitaph: "Here Lies Illinois' First State Fire Marshal, Gone to His Last Fire."

The office of the State Fire Marshal has to deal especially with the problem of fire waste. You have heard of the attention given to the subject of conservation within the last few years by the national congress, the various state legislatures, and the magazines and newspapers of the country. You have heard of conservation of water, conservation of timber, conservation of coal and conservation of minerals, in order that succeeding generations in this country may enjoy some of those blessings which we ourselves have enjoyed.

The conservation of those things is indeed essential in this country and should be uppermost in the minds of our people, but I want to say before this Commercial Club of El Paso tonight, that the greatest conservation problem confronting the citizens of Illinois and the citizens of the United States today is the conservation of our own property from the red plague of fire. It even is a greater conservation than the conservation of our natural resources. Why? Because water and timber and coal and the minerals have never cost man one single moment's time, one single act of energy, or one penny of his money. We found these things in their natural state. But, whenever a building is burned in this country, it represents money. Whenever the fire bell sounds the alarm that a building is being burned in this country, that much time, that much money and that much energy is taken out of the world and can never be regained as long as the old world stands.

More than that, it is important for you to know that for many years past our people have gone along reasoning that they could build and they could burn and build again, and that the fire insurance companies were

footing the bills. There could never be a greater mistake in the way of reasoning than to reason or to attempt to reason from that basis. The fire insurance company is nothing more than the agency to take your money and mine and to pay it to San Francisco; take your money and pay it to Baltimore, or Chicago, or Kansas City. Fire insurance companies simply take your money in premiums and pay it for the fire losses of the country so that it is wrong to reason that when it is announced that Mr. Jones had a fire last night and his building, worth \$10,000, was destroyed, that because there was \$8,000 insurance, there was only \$2,000 lost to the community. My friends, the entire \$10,000 was lost to the community at large and it is taken out of the world forever. A loss by fire is an irretrievable one and the people of the country pay this enormous bill.

Through all the ages, especially the civilized ages, there have been two great personal propositions, the first of which is that a man has the right to the enjoyment of health and the protection of his health. Many states of the Union have created state boards of health to deal especially with the problems of disease and to protect our people from the great plague of disease. You know that those departments, working especially along that line by authority of the law, having the right of quarantine and isolation, having authority to cause better sanitary conditions, have protected the lives and the health of our people.

And so, recently, some states, looking to the protection of property, with the same idea in view, have created what is known as a state fire marshal department, which has to do with the reduction of the fire waste—

First by empowering that department with the authority to investigate and to prosecute all persons alleged to be guilty of the crime of arson or kindred crimes.

Second, by a judicious inspection of buildings and the removal of extra hazardous conditions that might be the cause of burning those buildings and endangering the lives of inmates of those buildings.

Third, by a campaign of publicity and education along that line conferring with such bodies as we have here today, with the various city and village councils throughout the state and securing the enactment of better and more ideal building laws and ordinances and the prevention of the construction of buildings, within fire limits, of a dangerous character. The State Fire Marshal is made by law the supervisor of all prosecutions in every county of this State for the crime of incendiarism and arson.

It has been stated that the Fire Marshal's Department of the State of Illinois commenced actual and practical operations upon the first day of July. Consequently, when we opened the department we found a large number of alleged incendiary or crooked fires in this State, which had to be investigated.

Inasmuch as nearly all of the grand juries of the country counties meet early in the months of September, October and November, the attention of this Department has for the past two months been especially directed to the investigation of alleged incendiary fires. I have to say to you gentlemen, that I believe, and as a citizen of this State I regret to make the statement, that Illinois has been for many years, and is today, the very hotbed of incendiarism in this country.

Ohio, which has had a State Fire Marshal Department for the past eleven years, last year sent to the penitentiary for the crimes of arson, incendiarism and their kindred crimes, forty-six men. How many do you suppose were sent from Illinois? From the 102 counties of our State there were just four men convicted. Two sent to Joliet and two to Chester. During the month of August, the second month of the operation of the State Fire Marshal Department, we bound over to the various grand juries eighteen men and women for the crime of arson and incendiarism in Illinois, more than four times as many as were convicted in the whole twelve months of last year. Why? Are the State's Attorneys of Illinois less efficient than those of Ohio? No. The State's Attorneys of this State are equal, if not superior, of any body of State's Attorneys in the Union, but they have had neither the time, nor the men, nor the funds to properly investigate these fires and run down and convict those guilty of incendiarism and arson. They have been supposed to try everything from mumble-peg to manslaughter without funds in many of the country counties, while the State Fire Marshal Department deals with but one.

I say to you gentlemen, too, that the State Fire Marshal Department does not cease its work even if the insurance companies have adjusted the loss. If it be reported to the Fire Marshal office from an authentic source that the fire was a crooked one, this department will pursue it and prosecute it so long as we believe the individual is guilty of the crime, even though the insurance companies, as I say, have made an adjustment.

I have to call your attention to one noticeable instance in the neighboring county of Will. About two years ago there came in that community a man by the name of Emory A. Lawrence. He came from the east, a suave Chesterfieldian man in manner, a good business man, high in social circles. He rented a palatial home that was formerly the home of Judge Goodspeed in the suburbs of Joliet. He furnished the home with tapestries, oriental rugs and other luxuries. In due time a fire occurred. The insurance on those furnishings—he did not own the home—was carried by three companies in the city of Chicago. They went down and made an adjustment of the loss. He stood so high in social circles, was so prominent in church and business circles, that those companies seemed to think it a great privilege, as well as a great honor, to pay to Mr. Lawrence \$10,000 in cash. That was in February. About six weeks ago there came a report to the Fire Marshal Department at Springfield, that, notwithstanding the reputed high standard of citizenship represented by Mr. Lawrence, the fire was a crooked one. Without regard to the fact that the insurance companies had paid their bills we started an investigation, and within a day after our man arrived in Joliet, Mr. Lawrence and his wife left. We continued our search and investigation, and it finally developed that a shipment had been made two days before the fire in Joliet, of certain things to a storage house in the city of Chicago. We followed the goods there, recovered them upon a search warrant, and took them back to Will county. When the boxes were opened we found between \$3,000 and \$5,000 worth of tapestries and oriental rugs that Mr. Lawrence had received his money for, that the insurance companies had paid for, but which were never a part of that fire. As I say, Mr. Lawrence and his wife left. The last we heard of them they

were at Evanston. They left there under the names George A. Wilson and wife, Springfield, Illinois. This department, however, afterward secured his record. We found that this man who was received with open arms in society and business circles of Joliet had served four years in the penitentiary in Massachusetts for the crime of incendiarism and arson.

Governor Deneen has offered a public reward of \$200 for his capture, and want to say to you if I happen to be the State Fire Marshal, and if he ever gets back in the Commonwealth of Illinois, we will try to do for him as much as the Commonwealth of Massachusetts did.

My friends the problem of conservation today as I suggested is one of the greatest problems before our people. Last year more than \$235,000,000 worth of property was destroyed by fire in this country. If every building which was burned last year could be placed upon a lot of 65 foot frontage it would form a street reaching from the city of Chicago to the city of New York, and at every thousand feet of that desolate street of charred and blackened ruins you would find a crippled person, and at every three-quarters of a mile you would find a lifeless body of some one who was sacrificed to the red plague of fire in this country.

Of that tremendous waste Illinois bore \$11,000,000. Last year the fire waste in the State of Illinois was \$1,000,000 more than in the preceding year, and, while the year 1910 in the United States reached the high-water mark so far as losses by fire was concerned, yet, the first five months of this year we were \$3,000,000 in excess of the fire waste in the year 1910.

Is it any wonder that such meetings as this should be held? Is it any wonder that the various agencies employed throughout the country to spread the campaign of publicity and education should be at work? And I want to emphasize as best I can what has been said, that in the city of Chicago in the underwriters laboratories we have one of the greatest agencies for the spreading of this campaign of publicity and education and of fire prevention work of any agency in all the civilized world.

You say—How long must we stand this? Is there any other country under God's shining sun that could stand this tremendous drain upon its resources except the United States? Your answer must be that this is absolutely true. Why has there not been an earlier awakening? Because we have found timber and other building materials in its primitive state at our doors. We have builded and we have burned, and we have builded and we have burned again, and we have all been engaged in the making of money in various ways, and our properties have been destroyed, but we have gone upon the theory that the fire insurance companies paid the bills. My friends, you are the men who pay these bills, and the way to reduce fire insurance premiums in the State of Illinois, is to reduce the fire waste in the State of Illinois.

In addition to that, the question comes to us—Has any other country given thought to this? Yes, all of the European nations are many, many steps in advance of the United States in the matter of conservation of their property from the red plague of fire. This is notably true in Germany; every fire in the Empire of Germany is made a crime *per se*. That is to say, if you have a fire in your home or your business in the city of Berlin, you are charged with a crime, and you must prove conclusively to the authorities of the city of Berlin that you are in no

wise responsible either by carelessness or design. Get the "carelessness". If you are responsible either by carelessness or by design you cannot collect one dollar of your insurance. More than that, if you or your servants are by carelessness or design responsible for that fire, you must also pay for the time of the fire department engaged in putting it out. And, thirdly, they invoke what is known in this country as the common-law rule, that if by carelessness or design you are responsible for the burning of your neighbor's property you must pay for that too.

Last year, in the city of New York, a young man threw a lighted cigarette stub into some cotton clippings, and the result was that 126 lives were lost and nearly a quarter of a million dollars worth of property destroyed. What do you suppose they would do with that young man over in Germany? Here the young man is still at large and can light more cigarettes and throw the stubs around in more shirtwaist factories if he is so inclined. I do not want it understood that I believe that in this country at this stage we can enact the stringent laws on fire waste that they have in Germany; but I do want to call your attention to the difference in its working, gentlemen. Last year, in the city of Berlin, which is of about equal size to Chicago, the fire waste was less than \$200,000. During the same period of time we burned more than than \$6,000,000 worth of property in Chicago.

The city of Buffalo, in New York State, last year had a greater fire waste than London, the largest city in the world; and the city of Chicago had a fire waste nine times that of the city of Paris. Why? Why are the European cities so advanced? Because, on account of their dense population, they are "consuming nations." The more our population increases and the more our natural resources diminish and we become a consuming nation, the more thought will we give to the reduction of the fire waste.

I believe that the Fire Marshal office of this State, working in the three great channels laid before it, has the proper opportunity of reducing the fire waste to a minimum in this State. I have my heart set on the work, and my ambition is that, with the campaign now being carried on, the fire waste in Illinois may, unless we have a great conflagration, be reduced during the first year of the operation of the State Fire Marshal Department by at least 10 per cent. The reduction of the fire waste by that amount should mean a substantial reduction of the fire premiums to the people of this State.

I want to call your attention to another thing about the Illinois law. Notwithstanding the fact that the people who pay the premiums for this immense burden have the benefit of the operation of the Department, the taxpayers of this State do not pay a penny for its support. The Fire Marshal Department is under the supervision of the State, but as in Ohio and other states, it receives its revenue from an assessment of one-fourth of one per cent against fire insurance companies' gross receipts in this State. Out of the funds so received is paid all of the expense for the maintenance of the State Fire Marshal Department. Therefore, the people do not pay by taxation for the maintenance of this Department, as they pay for every other State Department, but they receive whatever benefit may accrue from its work. I believe that the first great work in this Department is the investigation and prose-

cution of crimes of arson. After those things have been accomplished, after the fear of the law has been properly instilled into the hearts of those men who are committing incendiarism, or arson, we can give greater time and attention to the work of inspection and the removal of hazards. But I believe that the first task is to have a thorough understanding with the firebug of this country, whether he is working individually or collectively, whether he belongs to a little or a big conspiracy, or to a little or big arson trust.

I believe that the meanest man today in all the Commonwealth of Illinois is the man who burns his property for reward. Ordinarily he comes into the community, rents a little shack, puts in some goods, a part of which he intends to burn, and a part of which he intends to move away, and sets fire to the building without regard to the lives or property of others. I have discovered, among other things, while I have been State Fire Marshal, in going over my chemistry lesson, that the greatest danger, Mr. State's Attorney, from spontaneous combustion, is that caused by the friction of a heavy insurance policy and a light stock of goods.

My friends, you have your Board of Health to say to the men whose place is insanitary, who is breeding smallpox, who is breeding typhoid fever, who is going to contaminate the community at large,—“You must clean up these premises.” If you have a contagious disease you must remain in quarantine until you have recovered, because the community at large must not suffer. I believe that you also have the right to the enjoyment of your property, and that there ought to be invested in some authority, like that of the State Fire Marshal, the power to say to a man who comes into a community, rents a little tumble-down shack, puts in a small stock of goods, takes out a big insurance policy and gets ready for his fire—“You shall not permit these conditions to obtain upon these premises. You shall not permit defective wiring to obtain upon these premises. You shall not permit that stove pipe to run through a wooden partition. You shall not permit the things which are going to endanger the lives and property of the community at large.” And to say to Mr. Firebug, whether he works single-handed and alone, or whether he works in company, that there is a special department which will make his trail a devious one leading down the path until, if he stays in Illinois he must take up his location either in Joliet or Chester. I say to you further, my friends, that it does not make a particle of difference to me, so long as I happen to remain at the head of this Department, whether or not there is insurance upon a building; whether or not it is burned for revenge or reward—in either case I have this to say to the insurance companies, that when we believe in our Department that a loss is a crooked one, they shall not use this Department as a means to compromise or whittle down their claim. But once a crooked loss is discovered, we want them to stay off of it until the highest court in the State of Illinois says that the man is not a firebug. I want, also, to say to you that no matter whether the authorities under the law at this time justifies it, other legislatures, if this work is properly done, will strengthen the hands of a good officer and a good depart-

ment as they have done in the State of Ohio. I sincerely hope that when the record of the first year of this Department shall have been made up the citizens of El Paso and the citizens of this State will be glad that they have a department looking after the reduction of this tremendous fire waste in Illinois, and conserving the properties of our people.

I thank you.

The following comprises the roster of officers and employes of the State Fire Marshal Department:

SPRINGFIELD, ILLINOIS, OFFICE

(Vacant)
State Fire Marshal
 F. R. MOGARIDGE
Assistant State Fire Marshal
 W. S. HOOPEs
First Deputy State Fire Marshal
 MISS MAE SMITH
Stenographer
 MISS MARY GORMAN
Stenographer
 MISS NELLIE SUTTON
Statistician
 JOSEPH L. MORGAN
Janitor

CHICAGO OFFICE

A. A. BACH
Chief Deputy Fire Marshal
 FRANK L. SALISBURY
Second Deputy State Fire Marshal
 NEILS JUUL, JR.
Deputy State Fire Marshal
 MISS OLIVE M. WHITE
Stenographer

DEPUTY STATE FIRE MARSHALS

IRA D. ADAMS, *Lexington*
 D. N. BLAZER, *Aledo*
 A. H. BOGARDUS, *Springfield*
 R. B. CONNOLLY, *Waukegan*
 S. LEGREID, *Centralia*
 H. S. LOVEJOY, *Springfield*
 R. B. LYTTON, *Metropolis*
 L. C. MCMURTRIE, *Lacon*
 HARRY MOSS, *Paris*
 JOHN RICHARDS, *Granite City*
 CHARLES J. ROBERTS, *Champaign*
 HENRY J. SLOAN, *Danville*

STATE FIRE MARSHAL LAW

[APPROVED June 15, 1909, in force July 1, 1909.]

AN ACT creating the office of State Fire Marshal, prescribing his duties and providing for his compensation and for the maintenance of his office.

STATE FIRE MARSHAL.—APPOINTED FOR FOUR YEARS' TERM.—BOND

SECTION 1. Be it enacted by the People of the State of Illinois represented in the General Assembly:—That the Governor is hereby authorized and empowered to appoint within sixty days after this Act shall take effect, and every four years thereafter, between the 15th day of January and the 1st day of February, by and with the advice and consent of the Senate, and also within thirty days after the occurrence of a vacancy in the office, a suitable person who shall be a citizen of this State, as State Fire Marshal, who shall give bond in the penal sum of \$5,000, with not less than two sureties conditioned for the faithful performance of the duties of his office, to be approved by the Insurance Superintendent, who shall devote his whole time to the duties of his office, and who shall hold office until his successor is appointed and qualified, the title of his office shall be State Fire Marshal. Such officer shall keep his office at the capitol in the city of Springfield, and may be removed for cause at any time by the Governor.

DUTY OF CHIEF ASSISTANT AND DEPUTY TO ASSIST STATE FIRE MARSHAL

SECTION 2. The State Fire Marshal is hereby empowered and required to appoint two deputy fire marshals to be designated as first and second deputies, and one chief assistant. The duties of said deputies and chief assistant shall be to assist the State Fire Marshal, and such appointees may be removed for cause by the said Fire Marshal.

DUTIES OF FIRE MARSHAL PERFORMED BY FIRST DEPUTY.—WHEN

SECTION 3. In the event of a vacancy in the office of Fire Marshal, or during the absence or disability of that officer, the first deputy marshal shall perform the duties of the office.

DEPUTY STATE FIRE MARSHALS AND OFFICE ASSISTANTS

SECTION 4. The State Fire Marshal is hereby empowered to appoint such additional deputy fire marshals and such office assistants as may be necessary for the proper and efficient conduct of his office.

SPECIAL INSPECTORS SKILLED IN BUSINESS OF FIRE INSURANCE.—POWERS

SECTION 5. The State Fire Marshal may in addition to the provisions of Section 4, appoint any person as inspector who may be known to him to be competent and skilled in the business of fire insurance and in the inspection of buildings and their contents. Such person shall have all the powers of other deputies to enter and inspect buildings, including their contents and occupancies, as provided under Section 9, and

it shall be the duty of such inspectors to report to the Fire Marshal any faulty or dangerous conditions found. Such deputy inspectors to be duly commissioned and serve without compensation.

CITY, VILLAGE AND TOWNSHIP OFFICERS REQUIRED TO MAKE FIRE REPORTS AND INVESTIGATE CAUSES

SECTION 6. The State Fire Marshal and the chief of the fire department of every city or village in which a fire department is established, and the mayor of every incorporated village or town in which he fire department exists, and the township clerk of every organized township without the limits of any organized village or city, shall investigate the cause, origin and circumstances of every fire occurring in such city, village, town or township by which property has been destroyed or damaged, and shall especially make investigation as to whether such fire was the result of carelessness or design. Such investigation shall be begun within two days, not including Sunday of the occurrence of such fire, and the Fire Marshal shall have the right to supervise and direct investigation whenever he deems it expedient or necessary. The officer making investigations of fires occurring in cities, villages, town or townships shall forthwith notify said Fire Marshal and shall within one week of the occurrence of the fire, furnish to the said Fire Marshal a written statement of all the facts relating to the cause and origin of the fire, and such other information as may be called for by the blanks provided by said Fire Marshal. The State Fire Marshal shall keep in his office a record of all the fires occurring in the State, together with all facts, statistics and circumstances, including the origin of the fires, which may be determined by the investigations provided by this Act; such record shall at all times be open to the public inspection, and such portion of it as the Insurance Superintendent may deem necessary shall be transcribed and forwarded to him within fifteen days from the first of January of each year.

TESTIMONY UNDER OATH.—ARREST.—PROSECUTIONS.—REPORTS TO INSURANCE SUPERINTENDENT WHEN REQUIRED

SECTION 7. The State Fire Marshal shall, when in his opinion further investigation is necessary, take or cause to be taken the testimony on oath of all persons supposed to be cognizant of any facts or to have means of knowledge in relation to the matter as to which an examination is herein required to be made and shall cause the same to be reduced to writing; and if he shall be of the opinion that there is evidence sufficient to charge any person with the crime of arson, or with the attempt to commit the crime of arson, or of conspiracy to defraud, or criminal conduct in connection with such fire, he shall cause such person to be arrested and charged with the offense or either of them, and shall furnish to the proper prosecuting attorney all such evidence, together with the names of witnesses and all of the information obtained by him, including a copy of all pertinent and material testimony taken in the case, and shall report to the Insurance Superintendent, as often as such superintendent shall require, his proceedings and the progress made in all prosecutions under this Act, and the results of all cases which are finally disposed of.

POWER TO COMPEL WITNESSES TO ATTEND AND TESTIFY.—PENALTY
FOR VIOLATIONS

SECTION 8. The State Fire Marshal, deputy State fire marshals and chief assistant fire marshal, shall each have power in any county in the State of Illinois to summon and compel the attendance of witnesses before them, or either of them to testify in relation to any matter which is by the provisions of this Act a subject of inquiry and investigation, and may require the production of any book, paper or document deemed pertinent thereto by them or either of them. Said State Fire Marshal, deputy State fire marshals and chief assistant fire marshal are each hereby authorized and empowered to administer oaths and affirmations to any persons appearing as witnesses before them, and false swearing in any matter or proceeding aforesaid shall be deemed perjury and shall be punished as such. Any witness who refuses to be sworn or who refuses to testify, or who disobeys any lawful order of said State Fire Marshal, deputy State fire marshals or assistant firemarshals or who fails or refuses to produce any book, paper or document touching any matter under examination, or who is guilty of any contemptuous conduct after being summoned by them or either of them, to appear before them, or either of them, to give testimony in relation to any matter or subject under investigation aforesaid, shall be deemed guilty of a misdemeanor and it shall be the duty of the State Fire Marshal, deputy State fire marshals or chief assistant fire marshal, or either of them, to make complaint against said person or persons so refusing to comply with the summons or order of said State Fire Marshal, deputy State fire marshals or chief assistant fire marshal, before any justice of the peace, police magistrate, or in any court of record in the county in which said investigation is being had, and upon the filing of such complaint, such cause shall proceed in the same manner as other criminal cases, and upon conviction any such person guilty of a violation of the provisions of this Act shall be fined in a sum not exceeding twenty-five dollars (\$25.00) and imprisoned until such fine is paid: Provided, however, that any person so convicted shall have the right of appeal. Said State Fire Marshal and his subordinates, or either of them, shall have the authority at all times of day or night, in the performance of the duties imposed, by the provisions of this Act, to enter upon and examine any building or premises where any fire has occurred, and other buildings and premises adjoining or near the same. All investigations held by or under the direction of said State Fire Marshal may, in his discretion, be private, and persons otherwise than those required to be present by the provisions of this Act, may be excluded from the place where such investigation is held, and witnesses may be kept separate and apart from each other and not allowed to communicate with each other until they have been examined.

INSPECTION OF BUILDINGS.—MAY ORDER REPAIR AND REMOVAL OF
DANGEROUS CONDITIONS.—APPEAL.—PENALTY

SECTION 9. The State Fire Marshal, his deputies and assistants, the chief of the fire department of all villages and cities where a fire department is established, and the mayor of cities or villages where no fire department exists, and the clerks of each township in the territory

without the limits of an organized city or village, upon complaint of any person having an interest in any building or property adjacent, and without any complaint, shall have a right at all reasonable hours, for the purpose of examination, to enter into and upon all building and premises within their jurisdiction. Whenever any said officers shall find any building or other structure which, for want of proper repair, or by reason of age and dilapidated condition, or for any cause, is especially liable to fire, and which is so situated as to endanger other buildings or property, or so occupied that fire would endanger persons or property therein, and whenever any such officers shall find in any building, or upon any premises combustible or explosive material, or inflammable conditions, dangerous to the safety of said buildings or premises, they shall order the same to be removed or remedied, and such order shall be forthwith complied with by the owner or occupant of said buildings or premises: Provided, however, that if the said occupant or owner shall deem himself aggrieved by such order he may within ten days appeal to the State Fire Marshal and the cause of complaint shall be at once investigated by the direction of the latter, and unless by his authority the order is revoked, such order shall remain in force and be forthwith complied with by said owner or occupant. Any owner or occupant of building or premises failing to comply with the orders of the authorities above specified shall be punished by a fine of not less than ten dollars (\$10.00) nor more than fifty dollars (\$50.00) for each day's neglect; such penalty to be sued for in the name of the People of the State of Illinois, upon the complaint of the fire marshal, assistant fire marshal, or the State's attorney, or any officer named herein, in the county in which such building or buildings shall be situated, before any justice of the peace or in any court of record, with right of appeal, and such penalty when recovered shall be paid into the county treasury of the county wherein such recovery is had: Provided, however, that in municipalities having building inspection and fire limits ordinances, nothing herein shall be construed to affect such local regulation, but the jurisdiction of the State Fire Marshal shall in such case be concurrent with that of the municipal authorities.

FINE FOR CITY, VILLAGE AND TOWNSHIP OFFICERS FOR NEGLECT TO MAKE REPORTS ON ALL FIRES

SECTION 10. Any officer referred to in section 6 herein who neglects to comply with any of the requirements of this Act, shall be punished by a fine of not less than twenty-five dollars (\$25.00) nor more than two hundred dollars (\$200.00), to be recovered as provided in section 9 of this Act.

STATE OFFICERS.—SALARIES FIXED BY LAW

SECTION 11. The State Fire Marshal shall receive an annual salary of \$3,000, the assistant fire marshal \$1,800: first and second deputy fire marshals \$1,500 each. Said fire marshal shall employ additional deputies, clerks and assistants and incur such other expense as may be necessary in the performance of the duties of the office, not to exceed, including salaries, such sum as may be paid to the Insurance Superintendent in the manner hereinafter provided.

REVENUE FOR THE MAINTENANCE OF FIRE MARSHAL DEPARTMENT.—
HOW PROVIDED

SECTION 12. For the purpose of maintaining the office of the State Fire Marshal and paying the expenses incident thereto, every fire insurance company, whether upon the stock or mutual plan, and all individuals, firms, corporations, associations or aggregation of underwriters doing business in the State of Illinois, shall pay to the Insurance Superintendent of the State of Illinois in the month of February annually, in addition to the taxes now required by law to be paid by such companies, associations, partnerships, firms, or individuals, not exceeding one-fourth of one per cent of the gross premium receipts of all such companies, firms, individuals, associations or partnerships on all business done in the State of Illinois during the year preceding or such portion of the year as this law may have been in effect as shown by their annual statement under oath to the Insurance Department, in case such company, association, firm, partnership or aggregation of underwriters is now required by law to make such annual report or does make such report, but it is expressly provided that from and after the taking effect of this law every such company, firm, partnership, association, or body of individuals acting as underwriters or insuring each other, no matter how or under what form the business of fire insurance is done, shall annually report to the Insurance Superintendent the gross premiums received for the year or portion of year preceding, and shall during the said month February of each year, pay to the Insurance Superintendent such amount as may be assessed, not exceeding one-fourth of one per cent of such gross premium receipts, as hereinafter provided. The Superintendent of Insurance shall cover the money so received into the State treasury as a special fund for the maintenance of said office of fire marshal and the expense incident thereto. Any portion of said special fund remaining unexpended at the end of any fiscal year not needed for the maintenance and expenses of the Department of Fire Marshal shall be carried forward to the next fiscal year and the next assessment correspondingly reduced. The said fire marshal shall keep on file in his office an itemized statement of all expenses incurred by his department and shall approve all vouchers issued therefor before the same are submitted to the Auditor of State for payment, which said vouchers shall be allowed and paid in the same manner as other claims against the State.

PENALTY FOR FAILURE OF FIRE INSURANCE COMPANIES TO PAY TAX

SECTION 13. Every company, firm, co-partnership, association or aggregation of individuals, or body of persons insuring each other, or their agents, representatives or attorneys in fact, who shall refuse or neglect to comply with the requirements of section 12 of this Act, shall be subject to a penalty of not less than one hundred dollars (\$100.00) nor exceeding five hundred dollars (\$500.00) recoverable in an action of debt at the suit of Attorney General, Insurance Superintendent, or State's attorney of the county in which the principal office of the firm, association, corporation, individual or co-partnership is situated, and if such violation is by a company, association, co-partnership or aggregation of individuals licensed to do business in the State of Illinois, such license may be revoked by the Insurance Superintendent and penalties re-

covered under the provisions of this Act shall be paid into the county treasury of the county in which such recovery is had.

FIRE MARSHALL.—DUTIES

SECTION 14. The State Fire Marshal shall not engage in any other business, and he, or one of his deputies, shall at all times be at the office of the fire marshal ready for such duties as are required by this Act.

ANNUAL REPORT

SECTION 15. The Fire Marshal shall submit annually, as early as consistent with full and accurate preparation, and not later than the first day of February in each year, a detailed report of his official actions to the Insurance Superintendent, and there shall be included in the annual report of such Insurance Superintendent such portion of the report of said fire marshal as shall be deemed desirable by such Insurance Superintendent.

FEES AND MILEAGE FOR REPORTING FIRES.—WHEN PAID

SECTION 16. There shall be paid to the chiefs of fire departments, and to mayors of incorporated villages, who do not receive compensation for their services as such chiefs and mayors, and to the township clerk of every organized township, who are by this Act required to report fires to the State Fire Marshal, the sum of fifty cents for each fire so reported to the satisfaction of the State Fire Marshal, and in addition thereto mileage at the rate of fifteen cents per mile for each mile traveled to the place of fire. Said allowance shall be paid by said State Fire Marshal at the close of each fiscal year out of any funds appropriated for the use of the office of said State Fire Marshal.

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WALTER H. BENNETT,

State Fire Marshal.

THIRD ANNUAL REPORT

OF THE

STATE FIRE MARSHAL

OF THE STATE OF

ILLINOIS

FOR THE YEAR

1913



WALTER H. BENNETT,
State Fire Marshal.



*WALTER H.
BENNETT*

State Fire Marshal of Illinois

11-2

LETTER OF TRANSMITTAL

Springfield, Ill., Feb. 1, 1914.

Hon. Rufus M. Potts,
Superintendent of Insurance,
Springfield, Illinois.

My dear Sir:

I have the honor to submit to you herewith, in accordance with Section 15 of an Act creating the office of the State Fire Marshal, prescribing his duties, etc., the Third Annual Report of the State Fire Marshal Department of Illinois, the same covering the operation of that Department from January 1, 1913, to December 31, 1913, inclusive.

All of which is respectfully submitted.

Walter H. Bennett

STATE FIRE MARSHAL.

25402

"Quincy No. 1—Rough and Ready."

The first fire engine brought to the State of Illinois. It was purchased by the City of Quincy in 1839, and was manned by volunteers from the ranks of the business men of the city. Now the property of the Quincy Historical Society, and located in the Historical Building at Quincy.



ANNUAL REPORT

FIRE MARSHAL DEPARTMENT

STATE OF ILLINOIS

In the preparation of this Annual Report it has been thought wise to divide it into five parts, namely: Part I---Department of Publicity and Education. II---Department of Inspection. III---Department of Investigation. IV---The Statistical Record. V---General Information.

COMPARATIVE STATEMENT

There were reported to the Fire Marshal Department during the year 1913 8,432 fires as compared to 9,092 for the year 1912. Since the Chiefs of Fire Departments are not required to report to this Department fires in which the damage is less than \$5.00, this report does not cover the hundreds of such fires which were extinguished by these efficient Departments with practically no damage. 3207 fires occurred in the City of Chicago and 5,225 in the State at large.

The total fire loss as reported to this Department for the entire year amounts to the enormous sum of \$13,666,438, of which \$5,140,353 represents the loss in the city of Chicago and \$8,526,085 represents the loss in the State at large outside of the City of Chicago. This is an increase of about \$2,000,000 over the loss as reported for the year 1912. This is accounted for in some respect by the fact that the summer was exceedingly hot and dry and fires which ordinarily would have been extinguished with very little damage, resulted in serious conflagrations. A number of small towns of the State not having proper water supply and fire fighting apparatus were practically destroyed by such fires.

Among the smaller towns which, considering their size, suffered from very disastrous fires are the following: Bridgeport had a fire which practically destroyed the entire business section of the city and caused a loss of \$100,000. A similar conflagration in Olney caused a loss of \$125,000; in Arenzville, \$90,000; in Farmer City, \$50,000 and in Weldon a loss of \$55,000.

There were a number of exceedingly large fires during the year 1913, which tended to materially increase the total loss, among which are the following: The fire which destroyed the plant of the Ford Manufacturing Company at Vandalia, Illinois, causing an estimated loss of \$500,000; the fire which destroyed the Dayton Tablet Factory at Quincy, Illinois, causing a

loss of \$300,000; the Globe Distillery at Pekin which was destroyed causing a loss of \$250,000, and the Car Barns of the Tri-City Railroad Company at Rock Island which was destroyed at a loss of \$225,000.

The loss by lightning was especially heavy, there being 419 lightning fires reported causing a loss of \$1,000,000. The Globe Distillery fire at Pekin and the Car Barns fire at Rock Island, which were mentioned above, were both lightning fires.

However, it is very probable that this excess of \$2,000,000 over the loss for 1912 is more seeming than real, inasmuch as never before have reports of fires been so carefully made and so earnestly tabulated as during the year 1913. In fact, I am convinced that the reported loss of 1912 did not represent anywhere near the total fire loss, and I am equally as sure that the loss over the State during 1913 represents practically the entire fire loss for the period. Our assistants throughout the State have been very prompt in reporting every fire loss, even to those fires which destroyed grain in the fields and in stacks. This loss has added materially to the total loss for the year.

Flying sparks on roofs, etc., caused 917 fires and a total loss of about \$800,000.

Defective flues and chimneys caused 762 fires and a loss of \$657,180.

542 fires causing a loss of \$500,000 were communicated by fires in adjoining buildings.

325 spontaneous combustion fires caused a loss of a quarter of a million dollars.

Carelessness with matches caused 470 fires and 2,637 fires were reported as being of unknown origin.

311 fires were of incendiary origin causing a loss of approximately \$400,000.

Overheated stoves and furnaces caused 496 fires and gasoline stoves and gasoline explosions caused 367.

PART I.

Department of Publicity and Education

Resume of the work of the Fire Marshal Department of the State of Illinois for the year 1913 prepared by F. R. Morgaridge, Assistant State Fire Marshal, who owing to a vacancy in the office of State Fire Marshal, was, under the law, the Acting Fire Marshal for the year 1913.

The work of the Illinois Fire Marshal Department is separated into three divisions. First, the Department of Publicity and Education; second, the Department of Inspection; and, third, the Department of Investigation.

DEPARTMENT OF PUBLICITY AND EDUCATION

I believe that in reality the Department of Publicity and Education is the most important feature of the work of fire prevention. This Department has endeavored by means of newspaper articles, bulletins, fire prevention booklets and literature and by means of public meetings throughout the various sections of the State, at which the question of fire prevention is discussed at some length, to instruct the people to the realization of their personal responsibility for the tremendous fire waste in this State.

This Department also edited a fire prevention booklet for use in the public schools throughout the State. Twenty thousand of these books were distributed throughout the various counties and while this booklet was not considered in any sense a text book, yet a number of lessons on the simpler means of fire prevention were included. There was also a section devoted to fire drills and first aid to those injured by fire. It is the idea of the Department that more good can be obtained by sending out a new booklet each year, thereby putting especial emphasis on the observation of fire prevention day and the study of fire prevention than could be obtained by editing a text book for permanent use.

This Department also had printed and distributed twenty thousand copies of the fire prevention day proclamation issued by the Governor, Honorable Edward F. Dunne, and fire prevention day, I believe, was generally observed by the schools throughout the State and by most of the cities and municipalities as well.

SUGGESTIONS FOR SCHOOLS.

All school buildings should be provided with metal receptacles for holding accumulations of waste paper and refuse in which it may be temporarily stored instead of allowing it to accumulate on basement floors or in wooden boxes or barrels. These receptacles should be located away from the stairs or corridors and within easy access of the water supply.

All the larger buildings, especially those of more than two stories in height, should be provided with fire escapes and the children should be taught how to use them. All doors should open outward and these exit doors should never be locked during school sessions. Chemical fire extinguishers marked "For Fire Only" should be set in conspicuous places on each floor near the stair landings and in the basements. Fire drills should be practiced at frequent intervals.

SCHOOL FIRE DRILLS.

Fire drills are aimed not so much at the fire as at the panic which usually accompanies it. The principal thing is to prevent the panic. The two points that are to be considered are, first—Order; and, second—Rapidity. See to it that the fire alarm system is always in perfect working order. See that the exit facilities are sufficient and are always unobstructed. It is usually advisable to have the children march out two by two, and where possible the march should be accompanied by music or singing to divert the minds of the pupils. Teachers should always follow to be certain that no child has been left behind. Some of the older children might be detailed as monitors, or the school could be organized, with certain fixed duties for the different officers in the organization. It is important to teach the pupils in the course of fire drills to overcome obstructions and to be prepared to meet emergencies in the event of an actual fire.

Fire drills should be to the fire escapes as well as to the exits and should conclude with a continued march of the children out of and away from the school building. I believe it is especially important to hold occasionally a fire fighting instruction program. There should be short talks by the teachers on fire prevention and the evils of carelessness. It is important that these lessons should be as free as possible from excitement and should be addressed to the common sense of the pupils rather than to their imagination.

I believe that stories of fire horrors and reference to disasters in schools usually do more harm than good, and should be avoided. Fire is particularly fascinating to many people and especially to children, and I believe that pyromania is frequently caused by arousing the imagination and excitement of children by stories of great fire disasters and by seeing such calamities illustrated by moving pictures.

The fire drill should be a business like affair, conducted in a business like manner, and for the specific purpose of getting out of and away from the building as rapidly as possible. Fire drills should be practiced frequently and at irregular and secret times, as these repetitions will familiarize children with their duties and in the event of fire they will not be taken unawares.

FIRE PREVENTION MEETINGS.

Fire prevention meetings were also held in eighteen cities in the State during the year 1913 at which the question of fire prevention was generally discussed by representatives from the Fire Marshal Department and by officials and business men of the cities as well.

The Fire Chiefs, Mayors and Town Clerks of the State of Illinois deserve great credit for the excellent work which they have done in assisting this Department in distributing the literature issued by the Department, for their co-operation in interesting the schools in the matter of the study of fire prevention and the observance of fire drills. The work of this corps of able assistants cannot be overestimated and I wish to thank them for their generous treatment and for their efficient work in this direction.

GENERAL BULLETINS.

During the year twenty-two bulletins were issued by this Department and mailed to the press throughout the State, to the Business Men's Associations, to the proper municipal authorities and to the schools. These bulletins were designed to instruct the people of the State relative to the special fire hazards such as explosives, lightning, gasoline, fire works, Christmas hazards, etc., and also covered many other subjects such as fire escapes, fire extinguishers, school buildings, fires in factories and in business houses. More than two hundred thousand of these bulletins were sent out during the year 1913, and I believe they have had a great effect in bringing this question directly before the people at large.

The following are a few of these bulletins that have been issued and distributed generally:

State of Illinois
Fire Marshal Department
Springfield

BULLETIN No. 7—Inspections

To All Chiefs of Fire Departments in the State of Illinois:

The time is rapidly approaching when the Fire Departments of the various cities in this and other States of our Union will be more engaged in the work of preventing fires than in the work of extinguishing them after they have once begun. The real work of fire prevention is rapidly spreading throughout this country and the Chiefs of the Fire Departments, by virtue of their office, are and ought to be, the real pioneers in work along this line.

Section 9 of the State Fire Marshal Act gives to the Chief of the Fire Department all the authority in the matter of inspections of buildings and the removal of dangerous conditions that is given to any member of the State Fire Marshal Department. His men can inspect buildings and whenever dangerous conditions are found, if there is no city ordinance governing the matter, as Chief he can issue an order based upon Section 9 of the State Fire Marshal Act ordering these conditions remedied or removed.

I believe that if the Chiefs of Fire Departments of the cities of Illinois would delegate two or three of their most capable men as inspectors, and keep them busily engaged in this work, the fire loss in the State of Illinois would be reduced fifty per cent. If some member of his Department who has fairly good knowledge of brick work would make a general inspection of flues and chimneys of the residence district of his city, fifty per cent of the defective flue and chimney fires could be prevented. There were 1102 defective flue and chimney fires in Illinois during the year 1912, and in one city where the Fire Chief had issued 150 orders for the repairs of flues and chimneys there was not a single defective flue fire during the year. All such fires are the result of carelessness and there is absolutely no excuse for them, and with the fourteen men of this Department, most of whom are required to spend most of their time in the investigations of incendiary fires it is impossible for us to do anywhere near as much of this inspection work as we would like to do. In some parts of the State these incendiary fires are now very rare and I believe that by the end of another year this Department will be in position to put most of its time in the work of inspections, which is in reality, the great work of the Department.

Any member of a Fire Department who will put in most of his time in this work of inspection will soon make his services so valuable that the city will be unable to pay him the salary he can command from some of the fire prevention or inspection bureaus.

State of Illinois
Fire Marshal Department
Springfield

BULLETIN No. 8—Moving Picture Machines

Requirements Demanded by the State Fire Marshal Department of Illinois

1. Every picture machine installed or operated in the State of Illinois shall be inclosed within a booth, to be not less than 5 feet x 5 feet x 6 feet in size, the frame of which shall be composed of angle iron not less than one inch by one-eighth inch, properly braced to secure rigidity and securely riveted or bolted at the joints. Every such booth shall be sheathed and roofed with sheet iron of not less than No. 20 B. and S. Gauge, or with one quarter inch hard asbestos board, to be securely riveted or bolted to the angle iron frame.

2. The booth shall be floored with the same material as the side and roof, riveted to the iron frame and covered with some non-conducting material.

3. The entrance door into the booth shall be no larger than 2 feet by 5 feet, of the same construction as the booth and so arranged as to close automatically by metal rope and weight attachment, or by a spring of sufficient strength and tension to keep the door securely closed.

4. All shelves, furniture and fixtures within the booth shall be constructed of a non-combustible material and no combustible material of any sort whatever shall be permitted or allowed to be within such booth, except the films used in the operation of the machine.

5. All picture machines shall be equipped with incombustible magazines for receiving and delivering the films during the operation of the machines. A shutter must be provided and placed in front of the condenser of the machine, so arranged that same can be instantly closed by the operator. Films not in the machine shall be kept in metal boxes, with tight fitting covers, within the booth enclosing the machine. Hot carbons taken from the lamps shall be deposited in a metal receptacle.

6. Each booth must have an opening, not less than 12 inches in diameter for ventilation, which must be flanged to carry standard conductor pipe for exhausting the hot air generated in operating the machine.

NOTE:—If possible, connection for ventilation should vent to chimney or outside of building, in order to carry off hot air or explosive gases.

7. Each exit from a moving picture theatre shall be marked with a red signal light and shall be marked "EXIT" in letters not less than 5 inches in height.

8. Two standard hand chemical fire extinguishers shall be provided, one inside the booth and the other located outside the booth near the door of the same.

9. No other opening into the booth except those specified above will be permitted.

State of Illinois
Fire Marshal Department
Springfield

BULLETIN No. 12—Fires Caused by Gasoline

The attention of the State Fire Marshal Department has been called to the number of serious fires recently caused by gasoline explosions, due to the careless handling and unsafe storage of this dangerous fluid. Nearly six hundred fires in the State of Illinois last year were directly caused by explosions of gasoline.

In the United States the igniting of the vapor from gasoline burns to death an average of thirty persons each week and seriously injures twice that number. In New Jersey recently twenty girls were killed, fifty seriously injured and property to the value of \$100,000 destroyed in a fire caused by gasoline explosion—the direct result of carelessness. A \$200,000 fire was started in a Winnipeg garage by horses stamping on a concrete floor while gasoline was being poured from open buckets into a gasoline tank in the building. The fumes spread over the floor and when a spark from one of the horse's hoofs caused an explosion the building and contents were entirely destroyed. At Alexander, Illinois, a tank of gasoline in a blacksmith shop exploded and caused a fire which destroyed a number of buildings and caused a loss of over \$30,000. At Bridgeport, Illinois, two entire blocks were swept away, property valued at an estimate of \$250,000 was destroyed in a fire caused by the explosion of gasoline in a small shop. A few days ago at Barry, Illinois, a small fire in a grocery store was communicated to a tank of gasoline, causing an explosion, and before the fire had been gotten under control a large part of the business section had been destroyed, causing a fire loss of nearly \$50,000.

Gasoline gives off a vapor constantly, and air which has mixed with it about ten per cent of gasoline vapor is more dangerous than gunpowder. Gasoline vapor, being a trifle heavier than air, falls to the floor and is moved above by draughts of air. There have been many cases in which women have been seriously burned by explosions of gasoline fumes due to creating a spark of frictional electricity by rubbing silk and other goods while being cleaned in gasoline.

The only reasonably safe and the only economical way in which gasoline can be stored is in properly constructed underground tanks. Dealers handling small quantities of gasoline should keep it in cans of not more than five gallons each, stored in a small building provided for the purpose, at least twenty feet from all other buildings.

CAUTION: The principal danger from gasoline lies in the fact that in ordinary temperature it continuously gives off inflammable and explosive vapor and a light some distance from the material will ignite it through the medium of this vapor. The vapor from one pint of gasoline will make 200 cubic feet of air a dangerous explosive. It depends upon the proportion of air and vapor whether it becomes a burning gas or a destructive explosive.

Beware of any leaks in cans and never forget how dangerous a material you are handling.

State of Illinois
Fire Marshal Department
Springfield

BULLETIN No. 13—Toy Pistols

To all Mayors, Chiefs of Police and Chiefs of Fire Departments in Illinois:

I beg to call your attention to a bill recently passed by the Legislature of the State of Illinois, making it a misdemeanor to sell, trade or give away a toy pistol so made or constructed that it can be used to shoot blank cartridges. This law is effective July 1st, 1913, and ought to be called to the attention of all your local dealers and to the newspapers of your city, so that there may be as few violations as possible on July 4th.

This is a good law, inasmuch as each year on July 4th many injuries and deaths are caused by accidents through the use of toy pistols. Any injury so received is apt to result in a case of blood-poisoning or lockjaw and a slight abrasion of the skin oftentimes results in death.

The following is a verbatim copy of the law as passed:

"An Act making it a misdemeanor to sell, trade or give away any toy pistol so made or constructed that it can be used to shoot blank cartridges; and to fix the punishment therefor.

"Section 1. Be it enacted by the People of the State of Illinois, represented in the General Assembly: That it shall be unlawful to sell, trade or give away any toy pistol so made or constructed that it can be used to shoot blank cartridges. Any person violating any of the provisions of this Act shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined in any sum not less than five dollars (\$5.00) and not exceeding twenty-five dollars (\$25.00)."

F. R. MORGARIDGE,
Assistant State Fire Marshal.

State of Illinois
Fire Marshal Department
Springfield

BULLETIN No. 14—Gasoline

To all Mayors, Chiefs of Police and Chiefs of Fire Departments in Illinois:

The Forty-eighth General Assembly passed an Act prescribing a color and label for gasoline receptacles. Many serious accidents and a great many deaths are caused each year in this State through people mistaking gasoline for kerosene. This law provides that all receptacles for holding gasoline shall be painted red and shall be labeled with the word "gasoline." It is made a misdemeanor, punishable by fine, for any retail dealer to sell gasoline to any person unless it is put into a red receptacle so marked "GASOLINE."

I believe the attention of your local dealers should be called to this Act, because I am convinced that should they sell gasoline to any customer and place it in a can not properly marked and of a red color they might be held for any accident which resulted from mistaking this gasoline for some other fluid. They would also be liable to a fine under the sections of this Statute.

The following is a verbatim copy of the bill:

"For an Act prescribing a color and label for gasoline receptacles.

"Section 1. Be it enacted by the People of the State of Illinois, represented in the General Assembly: That all receptacles for gasoline used in the retail trade shall be red, and shall be labeled "gasoline" in letters of a contrasting color and of a height of not less than one-half inch; and it shall be unlawful, in such retail trade or anything pertaining thereto, to put gasoline into any receptacle of any other color than red or not labeled as above required.

"Section 2. Any person violating the foregoing section of this Act shall be subject to a fine of not less than ten dollars."

F. R. MORGARIDGE,
Assistant State Fire Marshal.

State of Illinois
Fire Marshal Department
Springfield

BULLETIN No. 18—Lightning

Nearly 350 fires caused by lightning were reported to this Department in the year 1912, and in almost every instance the buildings damaged or destroyed were not protected by lightning rods. Many such fires are now being reported to this Department and that in which the Pekin Distillery was destroyed at a loss of \$125,000 is perhaps the most disastrous. There is no question but what rods properly set up and grounded will very greatly reduce the probability of lightning fires.

Protection against lightning is usually advisable on country buildings, on isolated buildings and on all buildings wherever located which have elevated features, such as tall chimneys, steeples or high peaked roofs. The ordinary condition causing a lightning discharge is a cloud charged with electricity at a greatly different potential from that of the earth. The difference of potential is finally sufficient to break down the stratum of air between earth and cloud and the electrical discharge takes place. The resistance of the air stratum is less between the cloud and top buildings and other high structures than between the cloud and the earth.

It is, therefore, desirable to locate the conductors forming the lightning protection so that the lightning will strike these and be carried to earth instead of tearing through the structure on its way to the ground.

Undoubtedly the best material to be employed is either copper tape or ordinary galvanized iron pipe. Either copper or iron is suitable for conductors, but iron should not be used in locations difficult of access, where corrosion is likely owing to the necessity of frequent painting to guard against such corrosion. Conductors when made of copper should be soft-drawn in the form of either tape or stranded cable. Conductors should be run as far as possible from interior piping, for if the conductors are run too near the pipe system there is a chance that the discharge may jump from the conductors to the pipes and in doing so start a fire.

A permanent and reliable ground is absolutely essential, and by far the best ground can usually be secured by connection to underground metallic water pipes. When this is impracticable ground plates or driven pipes should be used.

All exterior metal work, such as metal roofs, gutters, railings or chimney hoods, should be connected with the lightning rod system below the line of the metal work itself, or else should be separately grounded by regular conductors. Unless all such metal work is well grounded the discharge is liable to jump from this part to other conducting parts and possibly set fire to the intervening combustible material.

State of Illinois
Fire Marshal Department
Springfield

BULLETIN No. 19—Explosives

To all Mayors and Chiefs of Fire Departments in the State of Illinois:

I beg to call your attention to the fact that this Department has found in many instances considerable quantities of explosives, especially dynamite, stored in the business sections of many of the cities in this State. This is a serious menace to adjoining property and to the lives of the people of a city and I respectfully call your attention to Section 54-1 and part of Section 54-m, page 768, of the Revised Statutes, which reads as follows:

54-1. Where to be Stored—Penalty. Par. 5. That no person, firm, company or corporation shall store or keep any dynamite, nitro-chlorate or other explosive compound within three hundred yards of any inhabited dwelling if the same shall be located without any city, nor within the limits of any city except in conformity with the existing ordinances governing the storage or keeping of such explosive compound. Any violation of the provisions of this section shall be punished by a fine of not less than one hundred dollars nor more than five hundred dollars.

54-m. Sale and Transportation of—Record to be Kept—Penalty. Par. 6. It shall be the duty of every person in this State who shall sell or otherwise dispose of any such explosive compound as above described to keep a record of the name and residence of every person to whom he disposes of any such explosive compound, and the kind and amount thereof, and the date of such transaction, and such record shall be preserved for not less than three years. Etc., Etc.

From the above quotation of the law it will be seen that no dynamite nitro-chlorate or other explosive compound shall be kept within three hundred yards of an inhabited dwelling if the same shall be located without any incorporated city; nor within the city limits of any city except in conformity with existing ordinances. There is only one exception to the storage of dynamite and other explosive compounds within three hundred yards of an inhabited dwelling and that is within a city and then it must only be kept in accordance with existing ordinances.

Thus it will be seen that any one keeping dynamite within the limits of a corporate city and within three hundred yards of any inhabited dwelling, said city not having an ordinance governing such storage, is doing so contrary to the statutes and is liable to a fine of not less than one hundred dollars nor more than five hundred dollars.

F. R. MORGARIDGE,
Assistant State Fire Marshal.

State of Illinois
Fire Marshal Department
Springfield

BULLETIN No. 22—Schools

To the Principals and Superintendents of Schools in Illinois.

Gentlemen:—I beg to call your attention to conditions as they exist in some of the schools of this State as found by our Deputies on their tour of inspection. Reports which are coming to this office indicate that many of the schools of this State are not properly equipped with fire extinguishers or fire escapes, and also that in many of these schools accumulations of rubbish and other inflammable material are to be found.

Reports received so far this year indicate that at least 400 people will meet their death by fire in this State during the year 1913, and the very distressing feature of these fatalities lies in the fact that six out of every ten deaths reported are of children under the age of ten years. This would seem to indicate that the schools of this State ought to make some concerted effort to properly instruct the children on the dangers of fire and the awful results of carelessness in connection therewith.

Our Deputies have found three-story school buildings not provided with fire escapes and with narrow stairways and inadequate exits; they have found heaps of rubbish and other inflammable materials in the basements and garrets; they have found many schools that are not provided with fire extinguishers of any kind, and many others having extinguishers that have not been recharged within the memory of man, and the janitor and teachers have but the faintest idea of their proper use; they have found furnace pipes in basements so near the joists and floors that the woodwork was charred and carbonized and in a condition to readily ignite; and they have found many schools in which no fire drill is practiced and where an alarm of fire would be likely to result in disorder, demoralization and probably fatal results.

I trust that as the guardian of the children of this State, the one to whom the fathers and mothers have entrusted their most precious belongings, that you will give to this question of the fire hazard the attention which it deserves.

I would recommend that all school buildings of over two stories in height be equipped with proper fire escapes; that all schools be provided with chemical extinguishers of sufficient number to insure reasonable safety, and that some member of the local fire department instruct the janitor and teachers and the pupils in the proper use of these extinguishers.

Above all, I would suggest that some sort of fire drill be practiced at frequent intervals and that the teachers give some time to the instruction of their pupils on the subject of fire dangers, paying particular attention to bonfires, matches, and carelessness with gasoline and kerosene.

F. R. MORGARIDGE,
Assistant State Fire Marshal.

Proclamation!

STATE OF ILLINOIS

EXECUTIVE DEPARTMENT

Proclamation by the Governor

Among the many vital problems which will call upon our people for solution, the situation with regard to the waste of energy and resources in all parts of the country by fire is one of the most commanding. The subject of the conservation of our resources is at last deservedly receiving the most careful attention. Our forests are being preserved, our waterpower and waterways developed and utilized, and the hidden forces of nature conserved and made subservient to the well-being of man.

Statistics show that the fire waste is increasing annually and the fire loss last year in the State of Illinois averaged more than \$1,000,000 per month. Besides this, in that year alone nearly four hundred people in this State lost their lives through the agency of fire. The losses thus occasioned constitute an absolute waste and a drain upon our resources such as no nation or state can long endure, and the fact that they are largely preventable is a reproach to our people and calls for an immediate remedy.

For the reasons herein set forth and in order to arouse our people to a vivid sense of fire dangers and induce them to take more active interest in the subject, I hereby proclaim that Thursday, the

Ninth Day of October, 1913

be known as

State Fire Prevention Day

and I earnestly recommend that our people observe it by a general cleaning up and removal of rubbish, trash and waste from their premises.

Let all heating apparatus and chimneys be carefully gone over and placed in a proper condition for winter use.

Let all public and private institutions, hotels, asylums, factories and theaters be carefully looked over on that day and, when necessary, any changes made that will further protect the safety of the occupants.

Let local authorities give attention to the matter of better building regulations, fire protection and prevention, as well as added apparatus for fire fighting.

Lastly, let fire drills be held on that day in institutions, factories and in public, private and parochial schools, and I earnestly recommend that teachers instruct their pupils, through short talks and proper programs, on the dangers of fire and the simpler means of fire prevention.

Given under my hand and the seal of the State of Illinois, at the Capitol, in the City of Springfield, this first day of September, A. D. 1913.



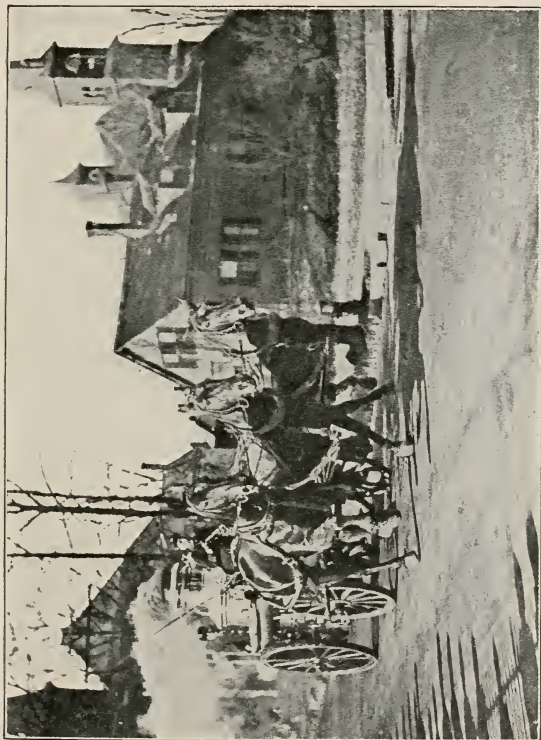
E. J. Dunne

Governor.

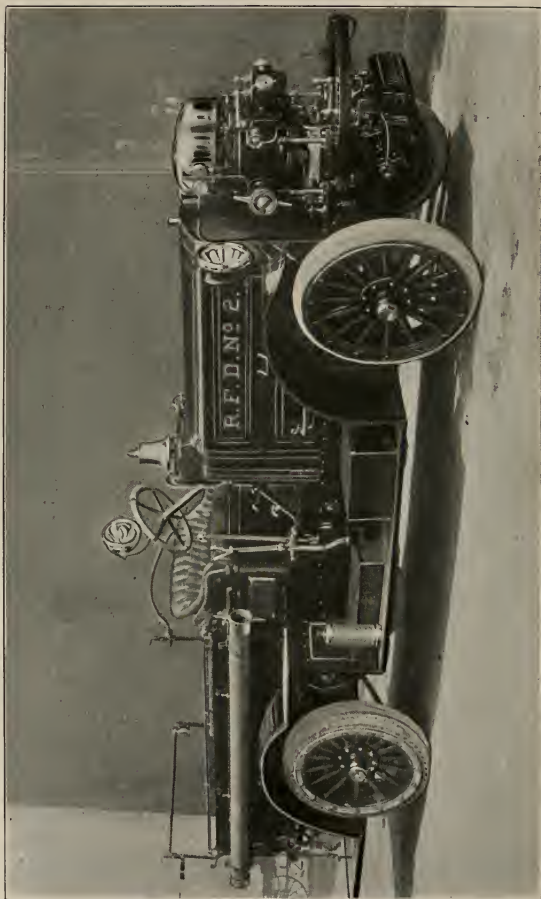
By the Governor.

Harry Woods

Secretary of State.



The Old Style Steam Pumping Engine.



The Modern Motor driven pumping engine which is rapidly displacing the old style horse drawn apparatus in the progressive cities of Illinois.

PART II.

Department of Inspection

DEPARTMENT OF INSPECTION

During the year 1913 a general and systematic plan of inspection was inaugurated by this Department. Practically every city in the State was visited by a representative from this Department, the business district of the city inspected and a general report submitted covering the especial fire hazard of that city, the fire apparatus, water supply, etc., etc.

More than seven thousand inspections were made during the year. These together with the six thousand and more inspections made by the Fire Prevention Association makes a total number of inspections of more than thirteen thousand. In most cases verbal orders for the removal of hazardous conditions were issued, but in especially hazardous cases written orders were issued. Seven hundred sixty-three such orders were issued during the year 1913, and in nearly every case the written order for the removal of hazardous conditions was quickly complied with. However, sixty-three persons were arrested for not complying with these orders and in each case a fine, together with the costs of the suit, was assessed against the defendant.

STATE FIRE PREVENTION ASSOCIATION.

The Illinois State Fire Prevention Association rendered valuable aid to this Department in the matter of inspections throughout the State. The members of this association are deputized as Special Deputy Inspectors for this Department and wherever an especially dangerous condition was found by one of these Inspectors the matter was reported to the Springfield office for such action as was necessary by this Department.

I am including herewith the report of the Secretary of the Illinois State Fire Prevention Association for the year 1913.

ANNUAL REPORT OF SECRETARY.

Since Jan. 1, 1913, we have inspected the following towns: Elgin, Carbondale, Murphysboro, Kankakee, Alton, Rock Island, Cairo, Quincy, Joliet, Moline, East St. Louis, Peoria, Galesburg, Litchfield, Aledo and Sterling. In these towns we have inspected 6,064 buildings and found 1,224 defects. Up to date we have advices that 740 defects reported have been corrected.

After inspecting a town a report of defects found is compiled, printed and sent each company that is a member of this Association. Thirty days after the inspection is made all cases where defects found are not corrected a second notice is sent out asking what action has been taken relative to correcting defects found at time of inspection. If we do not receive a reply to our second notice within 15 days the matter is referred to the Fire Marshal's office at Springfield and they send one or two of their deputies to follow up the cases that have not been reported corrected, and in such cases as is necessary a state order is issued accordingly. The Illinois Inspection Bureau is a member of this Association and one of their men go over the entire report of each town about 60 or 90 days after our inspection and in cases where defects reported are not corrected and are of serious nature the rate is increased accordingly.

At semi-annual meeting motion was made and carried that we send out framed placard "Fire Alarm" to post offices in towns in Illinois according to

requirements of Post Office Department, approval having been obtained from Post Master General at Washington, D. C., authorizing these placards to be placed in conspicuous place in post office properly framed, copy of this authority being placed on back of each placard.

Respectfully submitted,

J. A. MAVON,

Secretary State Fire Prevention Association.

PUBLIC BUILDINGS.

This Department has paid special attention to the inspection of school houses throughout the State where conditions have frequently been found to be especially hazardous. A total number of six hundred twenty-five school houses were inspected.

The matter of motion picture theaters was also given special attention and conditions in these houses are vastly improved over what they were a year ago.

Most of the inspections, however, were those of business houses in the various cities throughout the State where special attention was given to the accumulation of rubbish, defective electric wiring, defective flues, etc., etc.

Special blank orders covering each of these general inspections have been printed by this Department and placed in the hands of the various Deputies for use wherever necessary.

DEPARTMENT ORDERS

The following orders indicate one branch of the work in which this Department is engaged and these orders are issued from time to time as the occasion demands.

ORDER

ISSUED BY AUTHORITY OF THE STATE FIRE MARSHAL LAW.

Calling for Safe Storage of Gasoline and Other Volatile Oils.

....., Illinois,191.....
To

An inspection of the following described property, by me, namely:
..... located at Street,
..... Illinois, was made this day, in my official capacity as Deputy State Fire Marshal of the State of Illinois, and I find as the result of said inspection that gasoline, benzine or other volatile oils are kept in large quantities and stored in an unsafe and hazardous manner especially liable to cause fire and dangerous to the safety of property and persons therein.

Therefore, pursuant to the authority vested in me by virtue of my office

as Deputy State Fire Marshal of the State of Illinois, under Section 9 of an Act entitled, "An Act creating the office of the State Fire Marshal, describing his duties and providing for his compensation and for the maintenance of his office" as approved June 15, 1909, of the statutes of the State of Illinois, you are hereby ordered to remove or remedy the hazardous conditions as outlined above on or before theday of 191....., in the following manner:

and you are advised to in no wise omit complying therewith under penalty of the State Law.

.....
Deputy State Fire Marshal.

ORDER

ISSUED BY AUTHORITY OF THE STATE FIRE MARSHAL LAW.

For the Repair of Buildings.

....., Illinois,191.....
To

An inspection of the following described property, namely: located at Street, Illinois, was made by me this day in my official capacity as Deputy State Fire Marshal of the State of Illinois, and I find by this inspection that the building, by reason of age and want of proper repair, is in a dilapidated condition, and is especially liable to fire; and is so situated as to endanger other buildings and property, and so occupied that fire would endanger persons and property therein.

Therefore, pursuant to the authority vested in me by virtue of my office as Deputy Fire Marshal of the State of Illinois, under Section 9 of an Act entitled "An Act creating the office of the State Fire Marshal, describing his duties and providing for his compensation and for the maintenance of his office," as approved June 15, 1909, of the Statutes of the State of Illinois, you are hereby ordered to remove or remedy the hazardous conditions as outlined above on or before the day of 191....., in the following manner:

and you are advised to in no wise omit complying therewith under penalty of the State Law.

.....
Deputy State Fire Marshal.

ORDER

ISSUED BY AUTHORITY OF THE STATE FIRE MARSHAL LAW.

For the Removal of Rubbish and Other Waste Material.

To Illinois, 191.....

An inspection of the following described property, namely located at Street, Illinois, was made by me on this day in my official capacity as Deputy State Fire Marshal of the State of Illinois, and I find as a result of said inspection that there is upon the premises accumulations of rubbish and other combustible waste material especially liable to fire and dangerous to the safety of said buildings and premises.

Therefore, pursuant to the authority vested in me by virtue of my office as Deputy State Fire Marshal of the State of Illinois, under Section 9 of an Act entitled "An Act creating the office of the State Fire Marshal, describing his duties and providing for his compensation and for the maintenance of his office," as approved June 15, 1909, of the Statutes of the State of Illinois, you are hereby ordered to remove or remedy the hazardous conditions as outlined above on or before the day of 191..... in the following manner: Remove all accumulations of rubbish, excelsior, empty boxes and barrels, waste paper and other combustible waste materials from the premises and you are advised to in no wise omit complying therewith under penalty of the State Law.

.....
Deputy State Fire Marshal.

ORDER

ISSUED BY AUTHORITY OF THE STATE FIRE MARSHAL LAW.

For the Removal and Safe Storage of Dynamite or Other Explosives.

To Illinois, 191.....

An inspection of the following described property, by me, namely: located at Street, Illinois, was made, this day in my official capacity as Deputy State Fire Marshal of the State of Illinois, and I find as the result of said inspection that dynamite and other explosives are kept contrary to the State Law endangering both persons and property.

Therefore, pursuant to the authority vested in me by virtue of my office as Deputy State Fire Marshal of the State of Illinois, under Section 9 of an Act entitled, "An Act creating the office of the State Fire Marshal, describ-

ing his duties and providing for his compensation and for the maintenance of his office" as approved June 15, 1909, of the statutes of the State of Illinois, you are hereby ordered to remove or remedy the hazardous conditions as outlined above on or before theday of 191..... in the following manner: and you are advised to in no wise omit complying therewith under penalty of the State Law.

.....
Deputy State Fire Marshal.

ORDER

ISSUED BY AUTHORITY OF THE STATE FIRE MARSHAL LAW.

For the Repair or Rebuilding of Flues and Chimneys.

....., Illinois,191.....
To

An inspection of the following described property by me, namely located at Street, Illinois, was made this day in my official capacity as Deputy State Fire Marshal of the State of Illinois, and I find as the result of said inspection that the flues, chimneys, are in an unsafe and hazardous condition, and especially liable to cause fire and dangerous to the safety of the property and persons therein.

Therefore, pursuant to the authority vested in me by virtue of my office as Deputy State Fire Marshal of the State of Illinois, under Section 9 of an Act entitled "An Act creating the office of the State Fire Marshal, describing his duties and providing for his compensation and for the maintenance of his office," as approved June 15, 1909, of the Statutes of the State of Illinois, you are hereby ordered to remove or remedy the hazardous conditions as outlined above on or before the day of 191....., in the following manner: and you are advised to in no wise omit complying therewith under penalty of the State Law.

.....
Deputy State Fire Marshal.

ORDER

ISSUED BY AUTHORITY OF THE STATE FIRE MARSHAL LAW.

For the Proper Construction of Moving Picture Booths.

....., Illinois,191.....
To

An inspection of the following described property, namely: located at Street,

Illinois, was made by me on this day and I find by such inspection that the booth for enclosing the moving picture machine is not constructed according to existing regulations and requirements, and in the event of a fire occurring therein would not confine the fire for a sufficient length of time to safeguard the lives of the patrons of the theater, and making the fire especially liable to be communicated to other parts of the building and dangerous to the safety of said building or premises.

Therefore, pursuant to the authority vested in me by virtue of my office as Deputy State Fire Marshal of the State of Illinois, under Section 9 of an Act entitled "An Act creating the office of the State Fire Marshal, describing his duties and providing for his compensation and for the maintenance of his office," as approved June 15, 1909, of the Statutes of the State of Illinois, you are hereby ordered to remove or remedy the hazardous conditions as outlined above in the following manner: Reconstruct or repair the booth so that it shall conform with the requirements noted on Bulletin No. 8, a copy of which is attached hereto, and you are advised to in no wise omit complying therewith under penalty of the State Law.

.....
Deputy State Fire Marshal.



The above is on a prominent corner of one of the important cities of Illinois, the owner of which is reputed to be a wealthy and influential citizen. It is this character of fire hazard that the Department is endeavoring to have removed.

PART III.

Department of Investigation

DEPARTMENT OF INVESTIGATION

INVESTIGATION, ARRESTS AND PROSECUTIONS.

The following is a summary of the work of the Illinois Fire Marshal Department for the year 1913 in the investigation and prosecution of persons charged with incendiarism. I might state in this connection that this Department is called upon to investigate many fires of unknown origin in which there is no indication of incendiarism and these fires are not included in the classification below. These fires of unknown origin are investigated for the purpose of attempting to determine the cause so that precautions may be taken to avoid such fires in the future, and it is nothing against the honesty or integrity of a man who has a fire of unknown origin, to have such fire investigated by this Department. If, however, the investigation develops the fact that the fire was not of accidental origin, this investigation is continued in an effort to fix the responsibility for the fire and to prosecute the parties suspected of the crime.

The number of fires reported to this Department as being of incendiary origin were—311.

The number of fires investigated—301.

The number of arrests—124.

The number of indictments returned—92.

Cases tried and finally disposed of—65.

Number of persons convicted—46.

Number of persons acquitted—14.

Number of mistrials, jury unable to agree on a verdict—5.

Number of confessions obtained—10.

Number of cases pending—59.

MOTIVES. The motives which prompted the incendiary fires for which convictions were obtained in the year 1913, were as follows: Burning to defraud an insurance company, 18; arson for revenge, 9; pyromania, 9; malicious mischief, 10.

INVESTIGATIONS IN CHICAGO.

In connection with the investigation of the incendiary fires in the City of Chicago I wish to recognize the excellent work which is being done along this line by the City Fire Attorney, Mr. Joseph Murray, and his corps of assistants.

Sergeant Loftus and Officers Lynch, Burke and Donnelly are able investigators and have done very efficient work in the matter of investigating fires in the city of Chicago, which have been reported as being of incendiary origin. These officers have co-operated with the Deputies from the State Fire Marshal Department, have worked with them on many cases and have rendered valuable service both to the City of Chicago and the State of Illinois.

Previous to July 1st, 1914, this Department had but two investigators for the City of Chicago, but the increased appropriation which became available at that time made possible the appointment of eight additional Depu-

ties and so we have now ten investigators working out of the Chicago office. These additional men give a sufficient force to properly look after and thoroughly investigate all of the fires of incendiary origin in the City of Chicago which should result in materially decreasing the loss from this class of fires.

I wish especially to commend the State's Attorney of Cook county Mr. Maclay Hoyne, and his able assistants, for the energetic manner in which they have taken hold of the investigation of incendiary fires in Cook county, and for the vigorous manner in which they have prosecuted members of the Arson Trust in that county. Early in the year a special grand jury was called in the county of Cook for the purpose of inquiring into the matter of incendiary fires in the City of Chicago. Assistant State's Attorneys Johnson and Jennings took direct charge of many of these cases and have taken an active interest not only in the prosecution of these cases, but also in the investigation of fires reported as being of incendiary origin. As a direct result of the assistance and co-operation given by these officials this special grand jury returned more than sixty indictments for arson and burning to defraud. Fifteen cases have been tried in Cook county, resulting in eleven convictions and four acquittals. The people of the State of Illinois and especially of the county of Cook are indeed fortunate in having men of such unquestionable character and pronounced ability in a Department of such importance.

I wish at this time to thank the State's Attorneys of the various counties of the State of Illinois for their earnest co-operation in the matter of investigation of suspicious fires and the able manner in which they have prosecuted persons charged with arson and burning to defraud and for their assistance to this Department in the many cases which have been presented to them.

**A RECORD OF PROSECUTIONS FOR ARSON AND BURNING TO
DEFRAUD IN THE STATE OF ILLINOIS FOR THE
YEAR 1913.**

This record contains only those cases which have been brought to trial and finally disposed of and for which convictions were obtained.

Charles Hannibal, Springfield, Sangamon county, arrested September 2, 1912, charged with arson. Indicted by the grand jury of Sangamon county at the December Term for arson. Case tried in the circuit court of Sangamon county, January 9 and 10, 1913. Jury returned a verdict of guilty. Defendant was sentenced to the penitentiary at Chester for an indeterminate sentence of from one to twenty years. e

A. W. Holliday, Witt, Montgomery county, arrested August 11, 1912, charged with arson. Indicted at the November Term of the grand jury. Tried January 21, 22 and 23, 1913. Jury returned a verdict of guilty. (A new trial was granted in this case.)

Jesse Spengler, Witt, Montgomery county, arrested July 23, 1913, for arson. Indicted by the grand jury of Montgomery county at the November Term. Tried January 21, 22 and 23, 1913. Jury returned a verdict of guilty. Sentenced to the penitentiary at Chester for an indeterminate sentence of from one to six years.

David Ostermueller, Quincy, Adams county, arrested January 8, 1913, charged with arson and attempt to commit arson. Indicted by the grand jury of Adams county at the January Term. Defendant pleaded guilty and was sentenced to the Reformatory at Pontiac for an indeterminate sentence of from one to twenty years.

Patrick Sheehan, Chicago, Cook county, arrested October 8, 1912, charged with arson. Indicted at January Term of grand jury. Case tried January 20, 1913. Jury returned a verdict of guilty. Defendant was sentenced to the penitentiary at Joliet for an indeterminate sentence of from one to twenty years.

James E. Whitley, Atwater, Macoupin county, arrested February 1, 1913, charged with arson. Indicted February 5, 1913, for burning to defraud and arson. Arraigned February 20, 1913, for burning to defraud. Entered a plea of guilty and was sentenced to the Reformatory at Pontiac for an indeterminate sentence of from one to ten years.

Mose Burton, Galesburg, Knox county, arrested November 23, 1912, charged with arson. February 15, 1913, he was taken before the County Judge of Knox county where he was adjudged to be insane and a pyromaniac. Committed to the asylum at Watertown.

James Jackson, Vandalia, Fayette county, arrested January 15, 1913, charged with arson and attempt to commit arson. Tried in the circuit court of Fayette county, February 10, 1913. Verdict of guilty returned. Sentenced to the Reformatory at Pontiac for an indeterminate sentence of from one to ten years.

Edward Klasen and Fred Geirsbach, Maywood, Cook county, arrested February 7, 1913, for attempt to commit arson. Taken before Judge Pinckney of the Juvenile Court. Placed on probation for sixty days.

Joe Balchus, Westville, Vermilion county, indicted June 3, 1912, by the grand jury of Vermilion county for arson and attempt to commit arson. Tried in the circuit court of that county March 6 and 7, 1913, for arson. Jury returned a verdict of guilty. Sentenced to the Chester penitentiary for an indeterminate sentence of from one to twenty years.

Joe Humphries, East St. Louis, St. Clair county, arrested March 3, 1913, on a charge of attempt to commit arson. Taken before Judge Hay at Belleville for examination into sanity. Paroled for six months on good behavior.

Valentine Roitero, South Wilmington, Grundy county, arrested January 30, 1913, charged with arson. Indicted by grand jury of Grundy county on March 5, 1913, on a charge of malicious destruction of property. Arraigned before Circuit Judge, took a plea of guilty and was sentenced to the county jail at Morris, Illinois, for a period of four months.

Arthur Mitchell, Mt. Vernon, Jefferson county, indicted by the grand jury of that county at the March Term, 1913, for burning to defraud. Case tried in the Circuit Court April 16 and 17, 1913. Case resulted in a mistrial. Case retried at the September Term, 1913, September 15 to 18, 1913. Jury returned a verdict of guilty. Defendant sentenced to the Chester penitentiary for an indeterminate sentence of from one to ten years.

Julius Winskos, Portland City, La Salle county, arrested April 6, 1912, charged with burning to defraud. Indicted June 15, 1912. Case tried April 23, 1913. Defendant took a plea of guilty and was sentenced to the Joliet penitentiary for an indeterminate sentence of from one to ten years.

Christ F. Messer, Pekin, Tazewell county, arrested December 21, 1912, charged with arson. Indicted by the grand jury of that county at the April Term, 1913. Tried May 5, 1913. Entered a plea of guilty and was sentenced to the penitentiary at Joliet for an indeterminate sentence of from one to twenty years.

Egido Vecchio, Kankakee, Kankakee county, indicted by the grand jury of Kankakee county on May 5, 1913, for burning to defraud. Case tried May 26 to June 3, 1913. Jury returned a verdict of guilty. Sentenced to the penitentiary at Joliet for an indeterminate sentence of from one to ten years.

Paul Kovitz, Chicago, Cook county, arrested November 5, 1912, charged with burning to defraud. Indicted at the January Term, 1913, of grand jury. Case tried before Judge Burke June 20th to 29th, 1913. Jury returned a verdict of guilty. Sentenced to the penitentiary at Joliet for an indeterminate sentence of from one to ten years.

Edward Kovitz, Chicago, Cook county, arrested November 5, 1912, charged with arson and burning to defraud. Preliminary hearing January 4, 1913. Held to the grand jury. Indicted at the January Term, 1913. Case tried before Judge Burke, June 20th to 29th, 1913. Jury returned a verdict of guilty. Sentenced to the penitentiary at Joliet for an indeterminate sentence of from one to ten years.

Joseph Clark, Chicago, Cook county, arrested November 5, 1912, charged with arson and burning to defraud. Preliminary hearing January 4, 1913. Held to the grand jury. Indicted at the January Term, 1913. Case tried before Judge Burke, June 20th to 29th, 1913. Jury returned a verdict of guilty. Sentenced to the penitentiary at Joliet for an indeterminate sentence of from one to ten years.

W. A. Harris, Chicago, Cook county, indicted by the grand jury of Cook county April 5, 1913, for burning to defraud. Case tried August 9, 1913. Jury returned a verdict of guilty. Defendant was sentenced to the penitentiary at Joliet for an indeterminate sentence of from one to ten years.

Max Covitz, Chicago, Cook county, indicted by the grand jury of Cook county April 5, 1913, for arson and burning to defraud. Case tried before Judge Burke on August 9, 1913. Jury returned a verdict of guilty. Sentenced to the penitentiary at Joliet for an indeterminate sentence of from one to ten years.

Joe Kassell, East St. Louis, St. Clair county, arrested August 29, 1913, charged with attempt to commit arson. On September 4, 1913, he was taken before County Judge J. B. Hay, where he was adjudged to be of unsound mind and a pyromaniac. Committed to the asylum at Anna, Ills.

Criton Wilson, Villa Ridge, Pulaski county, arrested April 24, 1913, charged with arson. Indicted by the grand jury of that county and brought to trial at the June Term, 1913. Jury returned a verdict of guilty. Sentenced to the Chester penitentiary for an indeterminate sentence of from one to twenty years.

William F. Wesner, Centralia, Clinton county, arrested September, 1913, charged with arson. On September 20, 1913, he was taken before County Judge Green of Clinton county, where he was adjudged to be of unsound mind. Committed to the asylum at Anna, Illinois.

Frank Freme, Cherry, Bureau county, indicted by the grand jury of Bureau county on September 16, 1913, for arson. September 22, 1913, he entered a plea of guilty and was sentenced to the Reformatory at Pontias for an indeterminate sentence.

John Barnett, Carlyle, Clinton county, arrested September 15, 1913, charged with attempt to commit arson. He had attempted to set fire to the county jail while a prisoner therein. He was indicted for malicious destruction of property and sentenced to the county jail for sixty days.

Irving Suttles, Carlyle, Clinton county, arrested September 15, 1913, charged with attempt to commit arson. He had attempted to set fire to the county jail while a prisoner therein. He was indicted for malicious destruction of property and was sentenced to the county jail for sixty days.

Charles Nichols, DeKalb, DeKalb county, indicted by grand jury of DeKalb county October 27, 1913, for arson. November 3, 1913, defendant took a plea of guilty and was sentenced to the penitentiary at Joliet for an indeterminate sentence of from one to twenty years.

- Hyman L. Rosenberg, Chicago, Cook county, indicted by grand jury of Cook county at the January Term, 1913, for burning to defraud. Tried before Judge Tuthill, of the Criminal Court, in November, 1913. On November 12, 1913, the jury returned a verdict of guilty and defendant was sentenced to the penitentiary at Joliet for indeterminate sentence of from one to ten years.
- Mrs. Lizzie Bewley, Honey Bend, Montgomery county, arrested October 4, 1913, for burning to defraud. Indicted November 10, 1913, by grand jury for burning to defraud. Charge reduced to malicious destruction of property to which Mrs. Bewley pleaded guilty.
- George Clark, Arthur Kenney and James Willis, no permanent address, arrested October 27, 1913, at Williamsville, Sangamon county, charged with burning three box cars. Indicted by grand jury November 8, 1913, for arson. Indictment for arson failed to stand and prisoners were arraigned before County Judge Weaver charged with wilful destruction of property. Sentenced to county jail at Springfield for sixty days each.
- John Muldoon, no permanent address, arrested October 27, 1913, at Williamsville, Sangamon county, charged with burning three box cars. Indicted by grand jury November 8, 1913, for arson. Indictment for arson failed to stand and prisoner was arraigned before County Judge Weaver charged with wilful destruction of property. Sentenced to county jail at Springfield for thirty days.
- Nate Spira, Chicago, Cook county, indicted by grand jury of Cook county for conspiracy and burning to defraud. Tried before Judge Burke for burning to defraud. Jury returned a verdict of guilty. Sentenced to the penitentiary for indeterminate sentence of from one to ten years.
- Isaac LaBow, Chicago, Cook county, indicted by grand jury of Cook county for burning to defraud. Tried in the criminal court before Judge Tuthill on November 19, 1913. Jury returned a verdict of guilty. Sentenced to penitentiary for an indeterminate sentence of from one to ten years.
- Clifford Clarke, Mt. Carmel, Wabash county, indicted by grand jury at April Term, 1913, for arson. Tried in the circuit court before Judge Green. Jury returned a verdict of guilty. Sentenced to penitentiary at Chester for indeterminate sentence of from one to twenty years.
- John Fink, Jerseyville, Jersey county, indicted for malicious destruction of property. Confessed to Deputy Bogardus, State's Attorney Chapman and Deputy Sheriff Chappell. Taken before County Judge, entered a plea of guilty and was sentenced in December, 1913, to ninety days in the county jail and fined \$25.00.
- Chas. Shaw, Jerseyville, Jersey county, indicted in December, 1913, for malicious destruction of property. Confessed to Deputy Bogardus, State's Attorney Chapman and Deputy Sheriff Chappell. Taken before County Judge, took a plea of guilty and was sentenced to ninety days in the county jail and fined \$25.00.
- Elmer Gill, Ramsey, Fayette county, arrested December 24, 1913, charged with attempt to commit suicide by burning the house in which he lived. Given hearing before County Judge and found to be insane. Sentenced to asylum at Anna, Illinois, December 26, 1913.
- Joe Clark, Chicago, Cook county, indicted April 5, 1913, charged with burning to defraud. Tried December 6, 1913. Verdict of guilty and sentenced to Joliet penitentiary, one to ten years.

Ray Pfanschmidt, Quincy, Adams County, murder and arson. Arrested October 8, 1912. Pfanschmidt was accused of having murdered his father, mother, sister, and a young lady school teacher who was boarding with them, and of having set fire to the house and burned up the bodies to cover up the crime. The Fire Marshal Department of Illinois took a prominent part in the investigation of this fire and in the prosecution of the accused. Tried in the circuit court of Adams County March 18 to April 19, 1913. Jury returned a verdict of guilty. Punishment fixed at death. This case was appealed to the Supreme Court and on February 21st, 1914, an opinion was rendered reversing and remanding the case on the ground that affidavits submitted before the trial showed such strong prejudice in Adams County against the accused that a change of venue should have been granted, and ordered the case re-tried in some other county.

Dale Tolliver, Mt. Carmel, Wabash County. Indicted by the grand jury of Wabash County, April, 1913, for arson. Tried in the circuit court before Judge Green. Jury returned verdict of guilty. Sentenced to penitentiary one to twenty years.

S. F. Darr, of Quincy, and H. A. Six, of Springfield, were indicted and tried at Peoria in January, 1912, for conspiracy to defraud by burning. Verdict of guilty, and defendants sentenced to penitentiary for three years. Case appealed to Appellate Court and judgment affirmed in October, 1912. Case then appealed to Supreme Court where the judgment of conviction was affirmed, February 21st, 1914.

The following cases were tried, but resulted in mistrials because of the fact that the juries were unable to agree upon a verdict:

Arthur Mitchell, Mt. Vernon, Jefferson County, indicted March, 1913, for burning to defraud. Case tried April 16 and 17, 1913. Jury being unable to agree upon a verdict prisoner was remanded to the county jail for re-trial.

A. W. Holliday, Witt, Montgomery County, indicted by the grand jury of that county at the November Term, 1912, charged with arson. Brought to trial April 22, 1913. The jury being unable to agree upon a verdict was discharged. Case will be called for re-trial at the next term of the circuit court of that county.

Gustaf Hartrampf, Monee, Will County, arrested September 11, 1913, charged with arson. Indicted September 19, 1913. Tried for arson October 27, 28 and 29, 1913. Jury was unable to agree and was discharged. Prisoner remanded to jail under bond of \$10,000.

William Goodman, Danville, Vermilion County, indicted May 19, 1913, charged with burning to defraud. Tried December 29th to 31st, 1913. Jury was unable to agree and was discharged.

Alex Novac, Dorrisville, Saline County, indicted by grand jury of that county April, 1912, charged with arson and burning to defraud. Tried for burning to defraud before Judge William N. Butler, October 8, 9 and 10, 1913. Jury was unable to agree on verdict and was discharged.

There were also tried for arson and burning to defraud fourteen cases in which the defendant was found to be not guilty, and fifty-nine other cases are still pending.

THE TRAIL OF THE FIRE SERPENT

An Illustrated Elaborate Arson Plant.

In the month of July, 1913, this Department was called upon to investigate the Edelweiss Cafe fire in East St. Louis, and the story is told in pictures on the following pages.

In this building a most elaborate arson plant was found. Paraffin covered sacks filled with kerosene and beef bladders filled with gasoline were placed in various parts of the building. Bladders were used to prevent evaporation and the explosion which would naturally follow. Table cloths had been torn into strips and tied together and these soaked in kerosene extended from one part of the building to the other, and from one floor to the other through holes which had been cut in the ceiling. A miner's fuse, which had been stretched along the back stairs leading to the dining room, failed to work properly and the fire did not extend above the basement, except in the bar room which was entirely cut off from the rest of the building and so the fire was not communicated to other parts of the building. Twenty-four gasoline filled bladders were taken from this building. More than ten gallons of kerosene were poured out of the paraffin bags, showing that an immense quantity had been used in this plant. The proprietor of this establishment and his piano player, who left the building a short time previous to the fire, are now under indictment in connection with this case for burning to defraud.

The following cuts well illustrate the elaborateness of this plant.



Front view of the Edelweiss Cafe and Bar, East St. Louis, Illinois.



Interior of the bar, showing effects of the flash fire.



Rear door in dining room showing cloth saturated with kerosene and smokeless powder trail across the floor.



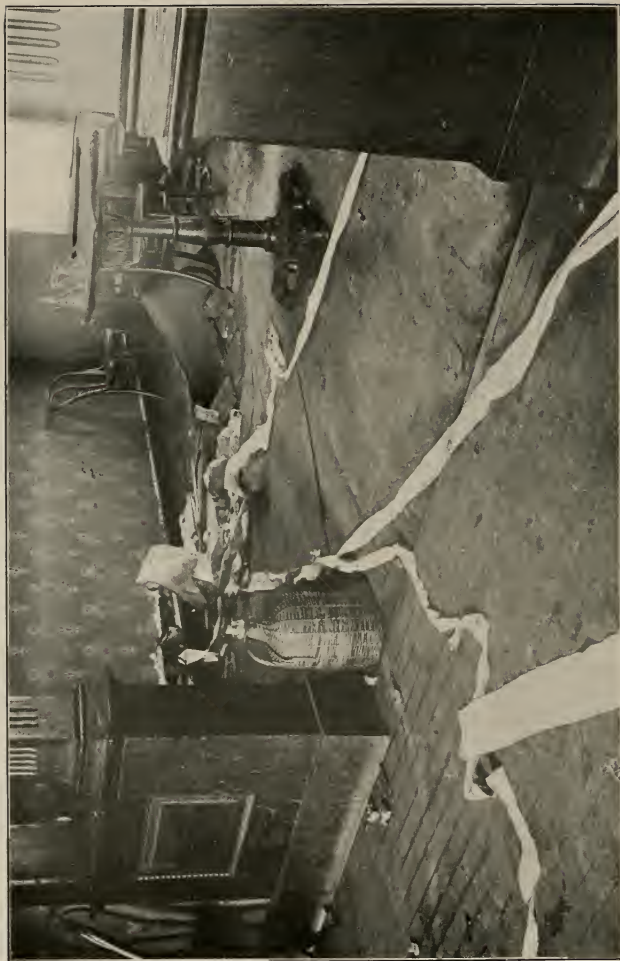
Opposite side of dining room, showing continuation of saturated cloth leading up through an opening made in the ceiling. Also showing paper bags filled with kerosene on one of the tables.



Wine room on the second floor showing saturated cloth and paraffin covered bag filled with kerosene.



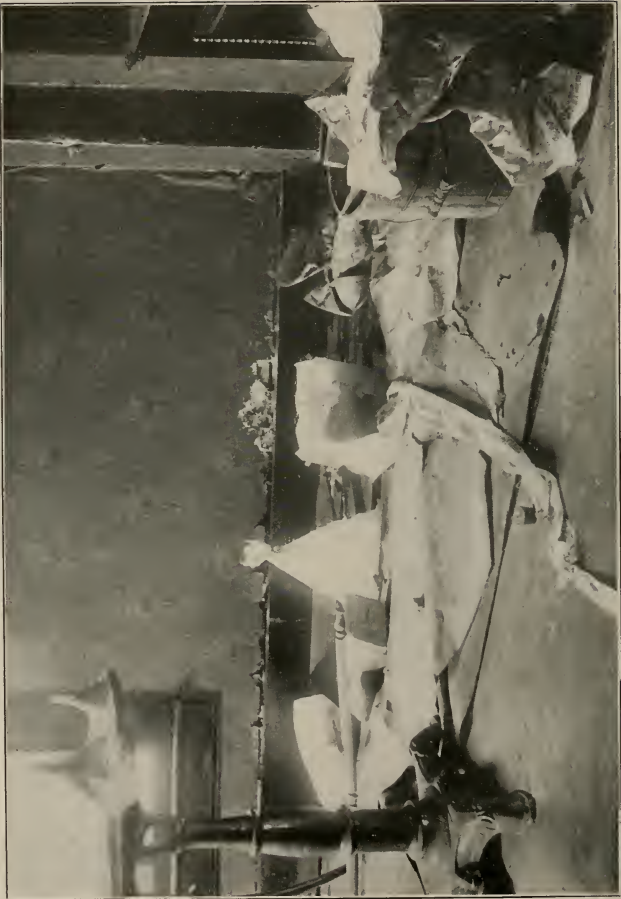
Another wine room showing trails across the floor.



Opposite side of wine room, showing bladder inserted in hole made in the plaster. This bladder was filled with gasoline. On the floor can be seen corks which had been taken from the gasoline cans. Funnels which were used in filling these bladders are seen on the small table shown in the picture.



Another corner of wine room, showing base board pulled away from wall and another bladder inserted where it would do the most good in the event of fire.



Cooking bags filled with kerosene and an open pail partially filled with kerosene are shown in this corner of the room.



This picture shows another side of one of the wine rooms and bladders inserted in the walls of the building.
Twenty-four such bladders were found in the plant in this building.



A LITTLE STORY OF A SUBURBAN HOME

The picture on the opposite page shows a beautiful suburban home in Quincy, Illinois, toward which was directed a conspiracy by one branch of the notorious arson trust of Illinois.

This property has been the scene of two or three incendiary fires. In October of 1913 a proposition was made to a citizen of Springfield, Illinois, to move into this property and burn it up. He communicated this information to the Fire Marshal Department and a Deputy from our Chicago office was called to Springfield and placed in charge of this investigation. This Deputy was introduced to the conspirators under an assumed name as a man who would probably be open to such a proposition. After about ten days' work these parties went to Quincy, Illinois, where the title to the property and the insurance on the same was transferred to this Deputy State Fire Marshal. It was understood that he was to have the ground on which the building stood and the salvage from the building in consideration of the fact that his name should appear in the deed to the property.

These conspirators were very frank in their statements that this property was transferred simply for the purpose of getting the title in the hands of someone who had not a fire record and of whom the insurance companies would have no suspicion and they stated that the interests of the other parties would be protected by mortgages against the property.

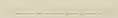
Harvey A. Six, of Springfield, Illinois, and U. A. Brady, of Decatur, Illinois, are now under indictment for conspiracy to commit arson in connection with this case.

MUNICIPAL RESPONSIBILITY

The State Fire Marshal Department of Illinois cannot do it all. Fire waste is the one big loss that ought to receive the intelligent attention of the City Council in cities, and the Board of Trustees in villages. A proper and well regulated inspection, by the local authorities of each city and village, of the local fire traps and fire hazard conditions, will result in a greater saving of money to that community than any other public investment of which we have any knowledge.

PART IV.

The Statistical Record



The Toll We Are Paying

THE RED PLAGUE OF FIRE CAUSES AN APALLING LOSS OF LIFE IN THIS STATE

Even though the fire loss in the State of Illinois in the year 1913 averaged about a million dollars a month, this loss was overshadowed by the tremendous loss of life.

There were reported to the Fire Marshal Department during the year 1913, 387 deaths caused directly by fire. Most of these deaths were the direct result of the grossest ignorance or carelessness.

Gasoline explosions caused more deaths in the State of Illinois during the year 1913 than any other cause, sixty-five such catastrophes having been reported during that time. Children are allowed to burn dry leaves in the fall and to play around bonfires at all seasons of the year, and fifty-five deaths were the direct result of such carelessness. Women continue to pour kerosene oil in the kitchen stove to aid in starting the fire, and forty deaths were reported as having been caused by the explosions which frequently follow. Children playing with matches caused forty deaths during the year, and the day is not far distant when the Legislature of this State will undoubtedly pass a law forbidding the use of the parlor match. Fifty-six people were burned to death in burning buildings and thirty-seven from having their clothing catch fire from stoves and open grates. Following is a complete summary of the deaths by fire:

Gasoline explosions	65
Burned in burning buildings	56
Clothing ignited from bonfire	55
Lighting fire with kerosene and kerosene explosions	40
Playing with matches	40
Clothing catching from stove	37
Unknown cause	11
Smoking in bed	9
Stove polish explosion	5
Sparks from fire crackers	5
Clothing ignited from open fire place	5
Lightning	5
Suffocated	5
Sparks set fire	4
Gas explosions	4
Hot iron set fire	3
Clothing ignited from gas plate	3
Scalded	3
Explosions of chemicals	3
Clothing ignited from lighted candle	3
Burned in railroad wreck	3
Furnace explosion	2
Electric wires	1
Fired jail to effect release	1
Trying to put out fire	1
Clothing ignited from cylinder on motorcycle	1
Clothing ignited from burning automobile	1
Lime kiln explosion	1
Not reported	15
Total number of deaths reported	387

DEATHS BY FIRE

MONTH OF JANUARY.

Tony Cioni, clothing caught fire from cook stove.
Mrs. Carrie Fry, explosion of stove polish.
Bernice Purdy, explosion of stove polish.
Mrs. Sol. Jackson, burned in a burning building.
Veatch Child, explosion of a defective furnace.
Jay Wood, explosion of a defective furnace.
John Parker, gasoline explosion.
Edward Jackson, burned in a burning building.
John Conners, burned in a burning building.
Fred Ford, burned in a burning building.
Joe Croneis, burned in a burning building.
Harry D. Burgess, burned to death in a railroad wreck.
Hugh M. Funk, burned to death in a railroad wreck.
John E. Carroll, burned to death in a railroad wreck.
William Breen, gasoline explosion.
Claude De Vault, burned in a burning building.
Marcia Ritter, burned in a burning building.
George Braun, burned in a burning building.
Margaret Braun, burned in a burning building.
Sandy Crittenden, acid in drug store.
Michael Carmody, clothing ignited from a bonfire.
Lillian Walstrom, clothing ignited from a cook stove.
Bert Clenworth, playing with matches.
Alvis Kropleske, lighting fire with benzine.
George Lazoroff, explosion.
Matilda Lefarto, clothing ignited from cook stove.
Francis Multack, sparks igniting clothing.
Constantine Papageoragon, starting fire with gasoline.
Lillian Erba, clothing ignited from hot blast stove.
Lillian Fialman, gasoline stove explosion.
Curmino Carlino, fell into fireplace.
Dominick Falilano, chemicals exploded.
Mary De Vault, burned in a burning building.
Ruby De Vault, burned in a burning building.
Maggie Chilinaugh, explosion of stove polish.
Lucile Mainor, playing with matches.

MONTH OF FEBRUARY.

Nora McCullen, playing with matches.
Veronica Kutchman, clothing ignited from lighted candle.
Mrs. Martha Patton, gasoline stove explosion.
Mr. Livingston, gasoline stove explosion.
Sarah E. Scanlon, clothing ignited from stove.
Mrs. Ella McLean, stove polish explosion.
William Dohney, gasoline explosion.
Emma Saucerman, lamp explosion.
Elmer Burch, gasoline explosion.
Theresa Skallish, clothing ignited from a bonfire.
Mrs. Alphonso De Loff, burned in a burning building.
Durkee Child, fell on the open stove.
Margaret Kramer, clothing ignited from stove.
Mary Bugacanie, clothing ignited from a bonfire.
Richard J. Byrne, gasoline explosion.
John C. Conley, electric wires.
Wyles Davis, clothing ignited from stove.
Elizabeth Hyzenki, clothing ignited from cook stove.

MONTH OF FEBRUARY—Continued.

Margaret Walsh, playing with matches.
Allen Drian, explosion.
Luch Karbonlon, burned by fire from stove.
Mary Everett, starting fire in stove.
Franziska Juszgowski, starting fire with kerosene.
Dominick Solvanica, gasoline explosion.
Arthur Schmidt, gasoline explosion.
Allen Burman, tunnel fire and explosion.
Chas. Bathme, tunnel fire and explosion.
Chas. Wiske, tunnel fire and explosion.
Aorel Zunzeely, clothing ignited from bonfire.
Unknown man, burned in a barn.
August Menitti, burned to death by gas explosion.
Alex. Semonetti, burned to death by gas explosion.
Cesare Viennitti, burned to death by gas explosion.
Joe Cinciatti, burned to death by gas explosion.

MONTH OF MARCH.

Anna Sekinger, clothing ignited from stove.
Unknown Man, clothing ignited from fire along the railroad.
Joseph Chalmers, rolled into a camp fire.
Harry Carter, burned to death in a burning building.
Charles McBride, discharge of a can of gunpowder.
Evaline May Armstrong, clothing ignited from bonfire.
Thomas Cassidy, starting a fire with gasoline.
Anna Sika, gasoline explosion.
Marie Newman, coal oil explosion.
Mary Lunini, gasoline explosion.
Vivian Harding, playing with matches.
Rose Ely, burned while playing.
Christine Erickson, exposure while escaping from a burning building.
Stanley Lawson, clothing set fire by another boy.
Marie Provost, kerosene explosion.
Josephine Karolas, playing with matches.
Rosy Karolas, clothing ignited from stove.
Hykua Kanaliski, gasoline stove explosion.
Frank Kelly, smoking in bed.
Dorothy Broen, clothing ignited from stove.
Lud Pollack, accidentally burned at home.
Arlo Slocum, burned in a burning building.
Rose Chawinsky, clothing ignited from bonfire.
Grace Kramer, clothing caught fire.
William H. Reed, clothing caught fire from bonfire.
Alfred Benham, burned in a burning building.
William Curry, stove explosion.

MONTH OF APRIL.

Glen Smithcamp, playing with matches.
Russell Cooper, playing with matches.
Bernie Martin, playing with matches.
Walter Blazovich, set bedding on fire with matches.
Katie Kapitan, clothing ignited from bonfire.
Leo Joseph Meyer, clothing ignited from bonfire.
Nicholas Challacombe, clothing caught fire from burning grass.
Mrs. Elenor Wheeler, clothing ignited from bonfire.
John Stadler, gasoline explosion.
John Strotter, gasoline explosion.
Hexie R. Durbin, clothing ignited from stove.
John Maxfield, overturned hot water on self.
Harry Neavor, stove explosion.
Caroline Dolegon, clothing ignited from bonfire.

MONTH OF APRIL—Continued.

Joseph Peterick, clothing ignited from bonfire.
Mary Smith, clothing ignited from bonfire.
Micheal Sellers, set fire to jail in order to effect a release.
Will Enright, kerosene explosion.
Daniel Webster, fell into bonfire.
Mrs. Ida Osbourne, clothing ignited from stove.
Mollie Povalinsky, clothing ignited from bonfire.
Mr. Crafton Stevens, burned in a burning building.
Mrs. Crafton Stevens, burned in a burning building.
Mary Elbrum, clothing ignited from cook stove.
Eliza Brown, gas range explosion.
Margaret Corsino, gas range explosion.
Orlando Schneidaker, gas tank explosion.
Albert Vectiko, clothing ignited from stove.
Grace Wendt, burned in a burning building.
Bridget Egan, playing with matches.
Joseph Kadley, trying to put out fire.
Nellie Sugure, clothing ignited from stove.
Fred Mason, burned in a burning building.
James Ryan, burned in a burning barn.
Jas. Milkowski, clothing ignited from bonfire.
Edward Schrieber, cigarette set bed on fire.
Mrs. John Jones, clothing ignited from bonfire.
Robert Glen Carmody, clothing set on fire by another boy.

MONTH OF MAY.

Margaret Posing, clothing ignited from bonfire.
Lincoln McColson, clothing ignited from bonfire.
Harry Noe, coal oil explosion.
Alice Kelley, clothing ignited from bonfire.
Ollie Reas, explosion in foundry.
Marie Cox, gasoline explosion.
Julia Thorn, clothing ignited from open fire place.
John Lamphere, playing with matches.
Rose Winthrow, clothing ignited from stove.
Frances Luella Moore, clothing ignited from bonfire.
Elizabeth Sweet, pipe set clothes on fire.
Clara Mossbach, playing with matches.
Olaf Peterson, burned in a burning building.
Robert Carmody, playing with matches.
Alice Ellsworth, clothing ignited from cook stove.
Rose Petrie, clothing ignited from hot ashes.
Willis Pentlimen, clothing ignited from bonfire.
Fannie Goldman, clothing ignited from stove.
Helen Allen, lamp explosion.
David Daily, cigar in hay loft.
Rosy Strainski, clothing ignited from bonfire.
Joseph Wondva, lamp explosion.
Mary Winschriski, clothing ignited from bonfire.
Ethel O'Mara, burns received from stove.
John Rinkas, playing with matches.
Lillian Rosenmaik, burned in a burning building.
Mary Knuszewskiez, clothing ignited from a bonfire.
Martha Leberman, burned in a burning building.
Angelina Marcantonto, clothing caught fire from unknown cause.

MONTH OF JUNE.

Evadna Gunnett, clothing ignited from fire crackers.
Martin Olsen, burned to death in a burning barn.
Charles Smith, clothing ignited from bonfire.
John Savicki, clothing ignited from lamp.

MONTH OF JUNE—Continued.

George Wyatt, starting a fire with kerosene.
W. J. Duitsman, lightning struck church.
K. S. Meyer, lightning struck church.
Wessel Holt, lightning struck church.
Mrs. H. Salmonds, starting a fire with kerosene.
Wassbach Child, playing with matches.
Reynold Evans, clothing ignited from bonfire.
Harvey Pearson, burned in a burning building.
Otto L. Wyle, gasoline explosion.
William Lumkiski, sparks ignited clothing.
Leonard Papot, burned in a burning building.
Geraldine Huffman, clothing ignited from bonfire.
John J. Manley, explosion of gasoline.
Ronald Evans, clothing ignited from bonfire.
Ella Zahrobsky, clothes ignited from burning punk.
Frederick Ranhauser, burned in a burning building.
Harvey Rahuelberg, clothes ignited.
Basil Wyrick, suffocated in burning building.
Alfred Matson, playing with matches.
Lenna Pupp, clothing ignited from bonfire.
Annetta Phillips, playing with matches.

MONTH OF JULY.

Forest Connelly, burned to death in a burning barn.
William Kelley, set bed on fire by smoking.
Roy Camm, gunpowder ignited from spark of fire cracker.
Walter Camm, gunpowder ignited from spark of fire cracker.
Ethel Burgess, gunpowder ignited from spark of fire cracker.
Minnie Daum, clothing ignited from cylinder on motor cycle.
Jacob Nobs, explosion of traction engine.
William Denson, gas explosion.
Fred Steckel, gas explosion.
Aron Steffie, suffocated in glass factory.
James Moore, suffocated in glass factory.
Harold Allen, kerosene explosion.
Herman Peters, burned in a burning building.
Mrs. E. Saunder, gasoline explosion.
Elizabeth Ferkel, clothing ignited from cook stove.
A. Allen, starting a fire with kerosene.
Melvin Berger, clothing ignited from bonfire.
Nellie B. Drake, clothing ignited from bonfire.
Johanna Gelderloos, playing with matches.
Gerald Hoffman, clothing ignited from bonfire.
Mary Kalas, playing with matches.
Emma Sehmman, playing with matches.
Wm. D. Schemhow, lighting gas plate.
Pasagria Suntuici, explosion of kerosene stove.
Rose Tatlenwski, clothing ignited from bonfire.
Frank Weingard, gasoline explosion.
Anna Lee Walters, gasoline explosion.
W. U. Newmer, clothing ignited from furnace fire.
Anna Pizwick, fell on stove.
Peter Rudwzski, benzine explosion.
Millard Schather, starting a fire with kerosene.

MONTH OF AUGUST.

Melvin Brouillette, clothing ignited from gasoline explosion.
Irene Starks, killed by lightning.
Herbert Barnes, clothing ignited from bonfire.
Mamie Bell Spaulding, playing with matches.
Anna Blasek, clothing ignited from chemicals.
Gertrude Kochhardiski, clothing ignited from bonfire.

MONTH OF AUGUST—Continued.

Love Smith, clothing ignited from stove.
Hannah Bendon, gasoline explosion.
Ella Holdridge, burned in a burning building.
Otto Hemminghoefer, gasoline explosion.
Chas. Wild, gasoline explosion.
John Blixt, gasoline explosion when automobile overturned.
Howard Clayton, struck by lightning.
Wilkie Child, clothing caught from bonfire.
Jahn Kemant, set bed on fire by smoking.
John Delly, clothing ignited from bonfire.
Rudolph Mason, scalded to death.
Joseph Bojuld, hot iron in steel mill.
Georgie Benz, clothing ignited from bonfire.
Ray F. Swanson, clothing ignited from bonfire.
Eva Muchmore, gas explosion.

MONTH OF SEPTEMBER.

Lillian T. Bringaze, playing with matches.
Victor Hall, clothing ignited from burning automobile.
Jennie Richardson, gasoline explosion.
Mrs. M. Dorsey, lamp explosion.
Mr. Albert Colburg, burned in a burning building.
Mrs. Albert Colburg, burned in a burning building.
Rexwell Colburg, burned in a burning building.
Ashley Colburg, burned in a burning building.
Kenet Colburg, burned in a burning building.
Infant Colburg, burned in a burning building.
W. A. Mills, gas explosion.
Ella Walton, playing with matches.
Josh Martin, powder explosion.
J. H. Kebler, powder explosion.
Grubbs Alby, powder explosion.
J. T. Bradey, clothing ignited from bonfire.
F. J. DeVanon, clothing ignited from sparks from iron.
Mary Daluck, gasoline explosion.
Florence Tucks, playing with matches.
Edward Ilkenhaus, playing with matches.
Helen Juske, playing with matches.
Genevieve Nulte, playing with matches.
John Mutulus, burning ammonia.
Anna Palmer, fell on gas stove.
Julia Paakovich, playing with matches.
Emory Brent, clothing ignited from bonfire.
Hermon Berger, sparks from lime kiln.
Florence Folks, clothing ignited from bonfire.
Gustine Jursite, playing with matches.
Genevieve Mills, clothing ignited from bonfire.
Robert D. Newman, playing with matches.
Eliza Periblum, gasoline explosion.
Ruth S. Leters, playing with matches.
Mary Novack, clothing ignited from stove.

MONTH OF OCTOBER.

Frederick Campbell, explosion in mine.
Charles C. Johnson, suffocation in a burning room.
Clarence J. Altes, suffocation in a burning room.
Wilbur Gates, gasoline explosion.
Agota Waiteckunas, starting a fire with coal oil.
Alice E. Raney, clothing ignited from cook stove.
Luzi Volpi, gasoline explosion.
Rhea Guyton, starting a fire with kerosene.
Sophia Walters, gasoline explosion.

MONTH OF OCTOBER—Continued.

Mrs. Ed. DeBov, starting a fire with kerosene.
Peter Mardigas, starting a fire with kerosene.
Mary McCleary, patent iron explosion.
James Wilson, burned in a burning building.
Mary Poba, starting a fire with kerosene.
Erma Bormak, starting a fire with kerosene.
Caroline Fields, clothing ignited from burning gas plate.
Bernice K. Gilbertson, ignition of turpentine.
Thos. Rigley, burned in a burning building.
Minnie Smith, clothing ignited from stove.
Ernest Schroeder, benzine explosion.
Jas. E. Sedan, burned in a burning building.
Katazna Nego, playing with matches.
Samuel Noveto, sparks set clothing on fire.

MONTH OF NOVEMBER.

T. O. Shannon, clothing caught from burning stubble.
William Hapeman, gas lamp explosion.
Gertrude Gierden, lamp explosion.
Henry Metts, clothing ignited from bonfire.
W. D. Laster, burned in a burning building.
Addie Laster, burned in a burning building.
Mary McFettridge, burned in a burning building.
Genevieve McFettridge, burned in a burning building.
Pauline McFettridge, burned in a burning building.
Norman Laster, burned in a burning building.
Minnie Kremitzki, clothing ignited from bonfire.
May Collins, clothing ignited from bonfire.
Helen Burke, clothing ignited from stove.
George Black, crushed in a burning barn.
Mrs. J. Mashburn, clothing ignited from bonfire.
Emma Anderson, burned in a burning building.
Rose Fischer, stove polish explosion.
Silas Moore, playing with matches.
James O'Connell, pipe set clothing on fire.
Richard Barry, playing with matches.
Ruskin Foster, clothing ignited from stove.
Henry Sandelberg, cigar set bed on fire.
Adalyne Seymore, playing with matches.

MONTH OF DECEMBER.

Anna Miller, clothing ignited from cook stove.
Garrett White, coal-oil explosion.
Luther Infant, scalded to death.
Rosa Lamb, fell into an open grate.
Clara Walker, starting a fire with kerosene.
Nellie Kavanaugh, burned in a burning building.
Katie Toohill, sparks from a stove.
Charles Andrews, lamp explosion.
William Stoenes, clothing set on fire by a negro.
Charles King, starting fire with kerosene.
Benjamin Brencland, gas stove explosion.
Winnie Ward, gasoline stove explosion.
Mary E. Gray, starting a fire with kerosene.
Gus Swanson, playing with matches.
William Douglas, burned in a burning building.
Charles Groshans, overcome by gas.
Herman Hansen, gasoline stove explosion.
Silvan Russell, kerosene stove explosion.
J. E. Cotton, clothing ignited from bonfire.
Mary Doran, gas plate.
Anna Egan, kerosene stove explosion.

MONTH OF DECEMBER—Continued.

Susan Ganoska, starting a fire with kerosene.
Minnie Grand, clothing ignited from gas jet.
Donald Bunk, magic lantern exploded.
Hans. C. Kettelson, burned in a burning building.
Alex Toeson, burned in a burning building.
M. Gleason, clothing ignited from bonfire.
Annie Kelly, lamp explosion.
Vulclawa Sys, playing with matches.
Mary F. Lombard, clothing ignited from cook stove.
Alfred Pfuff, explosion of lamp.
Frank Kirshman, explosion of lamp.
Nicholas Desletdorf, sparks from stove.
Sophia Hass, gas stove igniting clothes.
Julia Sorjen, clothing ignited from kitchen stove.
Sarah E. Willy, boiler explosion in hotel.
Lillian Ritch, burned in burning building.
Frank Madie, gasoline explosion.
Anthony Kirn, clothing ignited from bonfire.

PROPERTY LOSS

Aggregate Value of Buildings and Contents, Showing Insurance Thereon and Total Damage by Fire in the State of Illinois From January 1, 1913, to December 31, 1913.

Value of buildings	\$53,339,223
Damage to buildings	7,178,062
Insurance on buildings	28,998,440
Value of contents	29,480,797
Damage to contents	6,488,376
Insurance on contents	17,021,274
Total value of building and contents	\$82,820,020
Total insurance on buildings and contents	46,019,714
Total damage to buildings and contents	13,666,438

Aggregate Value of Buildings and Contents, Showing Insurance Thereon and Total Damage by Fire Outside the City of Chicago From January 1, 1913, to December 31, 1913.

Value of buildings	\$16,366,548
Damage to buildings	4,797,942
Insurance on buildings	9,077,293
Value of contents	11,421,793
Damage to contents	3,728,143
Insurance on contents	6,938,145
Total fire loss	\$8,526,085

Aggregate Value of Buildings and Contents, Showing Insurance Thereon and Total Damage by Fire in the City of Chicago from January 1, 1913, to December 31, 1913.

Value of buildings	\$36,972,675
Damage to buildings	2,380,120
Insurance on buildings	19,921,147
Value of contents	18,059,004
Damage to contents	2,760,233
Insurance on contents	10,083,129
Total fire loss	\$5,040,353

Total Fire Loss in the State of Illinois \$13,556,448.

**Number of Fires in the State of Illinois, Reported to This Department,
From January 1, 1913, to December 31, 1913.**

January	620	August	703
February	719	September	705
March	646	October	583
April	729	November	872
May	668	December	706
June	746		
July	735	Total number of fires	8,432

**Number of Fires Outside the City of Chicago, Reported to This Department,
From January 1, 1913, to December 13, 1913.**

January	301	August	491
February	407	September	373
March	354	October	383
April	452	November	624
May	407	December	477
June	469		
July	487	Total number of fires	5,225

**Number of Fires in the City of Chicago, Reported to This Department,
From January 1, 1913, to December 31, 1913.**

January	319	August	212
February	312	September	332
March	292	October	200
April	277	November	248
May	261	December	229
June	277		
July	248	Total number of fires	3,207

**Incendiary Fires Outside the City of Chicago, Reported to This Department,
From January 1, 1913, to December 31, 1913.**

January	14	August	13
February	12	September	14
March	12	October	18
April	12	November	20
May	13	December	30
June	11		
July	16	Total number of fires	185

**Incendiary Fires in the City of Chicago, Reported to This Department,
From January 1, 1913, to December 31, 1913.**

January	14	August	9
February	12	September	14
March	7	October	11
April	14	November	7
May	9	December	15
June	6		
July	8	Total number of fires	126

**Incendiary Fires in the State of Illinois, Reported to this Department, From
January 1, 1913, to December 31, 1913.**

January	28	August	22
February	24	September	28
March	19	October	29
April	26	November	27
May	22	December	45
June	17		
July	24	Total number of fires	311

**Classification of Property in the City of Chicago, Reported to This Department,
From January 1, 1913, to December 31, 1913.**

Automobiles	47	Laundries	11
Bakeries	18	Lumber yards	4
Barns	254	Office buildings	14
Buildings under construction	3	Packing houses	9
Bridges	2	Public buildings	13
Boat houses	3	Pumping station	1
Breweries	3	Power houses	8
Churches	15	Fool rooms	7
Commission houses	5	Publishing houses	4
Cattle pen	1	Restaurants	28
Coal pile	1	Railway property	23
Club house	1	Saloons	65
Dwellings	1539	Sheds	219
Dyers and cleaners	15	Shops	95
Dry kiln	1	Stores	341
Factories	185	Schools	8
Foundries	13	Theaters	3
Fertilizers	2	Vacant buildings	76
Fence	2	Warehouses	36
Engine houses	2	Wagons	1
Elevators	2	Greenhouses	3
Garages	53	Motorcycle	1
Grain elevators	3	Boat	1
Hotels	74		
Hay stacks	1	Total number of fires	3207
Hospitals	2		

**Classification of Property Outside the City of Chicago, Reported to This
Department From January 1, 1913, to December 31, 1913.**

Automobiles	14	Jail	1
Bakeries	9	Implements	15
Bridge	1	Laundries	8
Banks	4	Lumber yards	16
Barber shops	17	Lodge rooms	4
Barns	990	Meat markets	7
Blacksmith shops	34	Mills	10
Boat houses	3	Mills, planing	5
Boiler houses	3	Mills, saw	3
Breweries	2	Mines	8
Cab	1	Office buildings	48
Carpenter shops	13	Paint shops	12
Chicken houses	33	Power houses	7
Churches	32	Pump houses	6
Court house	1	Picture galleries	5
Club houses	5	Restaurants	49
Coal docks	2	Rooming and boarding houses	9
Creameries	2	Saloons	61
Cars	31	Silo	1
Coal washer	1	Schools	30
Dorinitory	1	Sheds	178
Depots	7	Slaughter houses	2
Dry kilns	1	Smoke houses	25
Dwellings	2578	Seed house	1
Dye and cleaning est.	7	Storages	86
Drill works	1	Stores	400
Electric light plants	5	Sand house	1
Elevators	25	Scale houses	2
Engine houses	4	Tower	1
Factories	96	Tailor shops	13
Foundries	1	Tanks	8
Fences	8	Telephone poles	3
Garages	37	Theaters	15
Green houses	2	Water Filter	1
Grain	91	Warehouses	8
Graineries	13	Wholesale houses	5
Gymnasium	1	Undertaking est.	1
Halls	9	Live stock	9
Hotels	50	Billiard and pool halls	12
Hospital	1		
Ice Houses	13	Total number of fires	5225

Summary of Causes of Fires Outside the City of Chicago, Reported to This Department, From January 1, 1913, to December 31, 1913.

Adjoining	325	Gasoline stove explosion	160
Alcohol lamp explosion	19	Heating, grease, oil, tar	14
Ashes against wood	36	Hot-box	8
Back fire (auto)	10	Incendiary	185
Boiler, defective	1	Kerosene exp., lamp, lanterns.....	75
Eonfires	72	Lightning, not rodded	419
Chimney, defective	631	Matches, carelessness with	160
Christmas tree	3	Matches, children with	73
Clothing too near stove	22	Oil, carelessness with	16
Dry kiln, defective	5	Painter's torch	5
Electric wiring, defective	119	Sparks on roof (flying)	775
Films caught fire	3	Smoking meat	19
Fire works	16	Smoker's carelessness	59
Flat iron on wood	8	Spontaneous combustion	198
Fumigating	7	Stove too near wood	5
Furnaces, stoves, overheated	226	Stove pipe too near wood	57
Gas explosion	7	Tramps	33
Gas jet set fire	16	Unknown	1357
Gas plate too near wood	4		
Gasoline explosion	77		5225

Summary of Causes of Fires in the City of Chicago, to This Department, From January 1, 1913, to December 31, 1913.

Adjoining	217	Lightning	21
Back fire	18	Matches	308
Boys set fire	19	Oil stoves	46
Burning grease	7	Overheated stoves and furnaces..	270
Burning rubbish	66	Sparks	142
Burning tar	13	Spontaneous combustion	61
Cigars	48	Supposed incendiary	126
Christmas trees	10	Salamanders	8
Defective flues	131	Tramps	11
Defective wiring	75	Thawing pipes	36
Electric irons	3	Unknown	1280
Explosions	44	Hot metal	2
Fire works	3	Painters' torch	1
Fumigating	6	Wrecked by storm	2
Friction	5	Plumbers	1
Gasoline, benzine	84	Robbers	2
Gas jets	44	Mice	2
Hot ashes	31		
Lamps, candles	64	Total number of fires	3207

**Summary of the Causes of Fires in the State of Illinois, Reported to This
Department, From January 1, 1913, to December 31, 1913.**

Adjoining	542	Hot-box	8
Alcohol, explosion	19	Incendiary	311
Ashes against wood	67	Kerosene exp., lamp, lantern	139
Back fire (auto)	33	Lightning	440
Boiler, defective	1	Matches, carelessness	470
Bonfires	72	Matches, children set fire	92
Chimney, defective	762	Oil, carelessness	16
Christmas tree	13	Plumbers	1
Clothing too near stove	22	Robbers	2
Dry kiln, defective	5	Painter's torch	6
Electric wiring, defective	194	Sparks	917
Films caught fire	3	Smoking meat	19
Fire works	19	Smokers' carelessness	107
Flat iron on wood	11	Spontaneous combustion	325
Fumigating	13	Salamanders	8
Furnaces, stoves, overheated	496	Stove too near wood	5
Gas explosions	51	Stove pipe too near wood	57
Gas jet set fire	60	Tramps	44
Gas plate too near wood	4	Thawing pipes	36
Gasoline explosion	161	Unknown	2637
Gasoline stove explosion	206	Wrecked by storm	2
Heating greases, oil, tar	34		
Hot metal	2		
			<hr/>
			8432

Classification of the Fire Loss in the State of Illinois, Outside the City of Chicago, Giving the Number of Fires and the Loss, Classified According to Causes, From January 1, 1913, to December 31, 1913.

Causes.	No.	Amount.
Adjoining	325	\$530,029
Alcohol lamp explosion	19	16,145
Ashes against wood	36	25,513
Back fire (auto)	10	35,010
Boiler, defective	1	3,500
Bonfires	72	229,608
Chimney, defective	631	757,180
Christmas tree	3	238
Clothing too near stove	22	3,666
Dry kiln	5	51,275
Films caught fire	3	1,940
Electrical wiring, defective	119	258,433
Fire works	16	7,466
Flat iron on wood	8	5,137
Fumigating	7	12,687
Furnaces, stoves, overheated	226	364,830
Gas explosion	7	734
Gas jet set fire	16	13,099
Gas Plate too near wood	4	900
Gasoline explosion	77	103,008
Gasoline stove explosion	160	248,103
Heating, grease, oil, tar	14	7,764
Hot-box	8	31,940
Incendiary	185	291,968
Kerosene lamp, lantern ex.	75	60,118
Lightning, not rodded	419	1,104,693
Matches, carelessness with	160	118,382
Matches, children with	73	42,443
Oil, carelessness	16	12,817
Painter's torch	5	4,920
Sparks on roof (flying)	775	733,552
Smoking meat	19	4,962
Smoker's carelessness	59	38,095
Spontaneous combustion	198	254,478
Stove too near wood	5	1,880
Stove pipe too near wood	57	32,138
Tramps	33	40,778
Unknown	1357	3,076,656
	<hr/> 5225	<hr/> \$8,526,085

FINANCIAL STATEMENT

Expenditures of the Office of the State Fire Marshal From January 1, 1913,
to December 31, 1913.

Appropriation for Deputies, Clerk Hire, Etc.

Balance January 1, 1913	\$12,151.93	
Appropriation available July 1, 1913	38,280.00	
Total	50,431.93	
Amount expended	31,405.32	
Balance January 1, 1914		\$19,026.61

Appropriation for Rent and Expenses.

Balance January 1, 1913	\$ 8,244.05	
Appropriation available July 1, 1913	6,000.00	
Total	14,244.05	
Amount expended	7,143.35	
Balance January 1, 1914		\$ 7,100.70

Appropriation for Traveling Expenses.

Balance January 1, 1913	\$18,934.30	
Appropriation available July 1, 1913	24,000.00	
Total	42,934.30	
Amount expended	21,700.43	
Balance January 1, 1914		\$21,233.87

Appropriation for Stenographer Fees.

Balance January 1, 1913	\$ 1,332.28	
Appropriation available July 1, 1913	3,000.00	
Total	4,332.28	
Amount expended	2,411.76	
Balance January 1, 1914		\$ 1,920.52

Recapitulation.

Appropriation for deputies, clerks, etc.	\$50,431.93	
Appropriation for rent and expenses	14,244.05	
Appropriation for traveling expenses	42,934.30	
Appropriation for stenographer fees	4,332.28	
Total appropriations		\$111,942.56
Amount expended, appropriation for deputies, etc.	\$31,405.32	
Amount expended, appropriation for rent and expenses	7,143.35	
Amount expended, appropriations for traveling expenses	21,700.43	
Amount expended, appropriation for stenographer fees	2,411.76	
Total expended		\$62,660.86
Total balance		\$49,281.70



Fighting the Fire.



Water Tower at Work on Buildings.

CLEAN UP!

"We say that this unwarranted fire waste in the State of Illinois is largely a question of individual responsibility. We maintain that if the citizens of Illinois would use ordinary judgment along these lines, that the fire waste in this State would be more than cut in half; that you men who are sitting here tonight, together with all other citizens of Illinois, hold within your hands the means and agencies which will do the very things we are talking and preaching all over the State. If the business men of this State would use more precaution in cleaning up, and would just use ordinary judgment in keeping their property free and clear from hazardous conditions, we would have no trouble in obtaining results along the lines of our endeavor."—From the State Fire Marshal's Address at Centralia, Feb. 18, 1914.

PART V.

Address of the State Fire Marshal

The Fire Marshal Law of Illinois

Roster of Officers and Employes

ADDRESS BY WALTER H. BENNETT

State Fire Marshal of Illinois, Before the State Fire Prevention Association Meeting and Banquet at Centralia, Illinois, February Eighteenth, Nineteen Fourteen.

Mr. Toastmaster and Gentlemen of the Association:

I desire first to express my appreciation for the magnificent response you have made to the invitation of the committee having this meeting in charge, to come together tonight and participate in this campaign now being carried on all over our beloved State for an awakened civic pride and an aroused public conscience along the line of public betterment. I am constrained to believe that this magnificent representation of the citizens of this beautiful little city in southern Illinois, is the very best evidence of the interest that you are taking in our work.

We are at the present day living at a time in the history of our Country when the question of the preservation of resources, natural and otherwise, is receiving a great deal of attention. It therefore seems to me that the question of the preservation of any sort of property from all sorts of extravagant or needless waste, should receive a kindly reception from the general public, and I am sure that it is also eminently fit and proper that we should gather together at this time for the purpose of discussing ways and means of becoming more familiar with the preservation and conservation of all forms of material wealth.

The fact that this subject of conservation is receiving the attention of men of brains throughout this Country was aptly illustrated by a request which was received at our office the other day from Harvard University through the Chairman of the Legislative Bureau, in which that Institution inquired whether or not the State Fire Marshal Department of Illinois had established, or had in force any modern theories on the proposition of the prevention of forest fires. While it is true that forest preserves in Illinois are very limited, yet upon an investigation of the records of our office we were able to furnish Harvard University with some of the information desired by it.

The law creating the State Fire Marshal Department of Illinois was passed in 1909, but on account of a failure to make any appropriation at that time, no work could be done until July 1st, 1911, so that this Department really began its activities at that time.

The Department therefore is less than three years old, but because of the marvelous executive ability and generous public service of my distinguished predecessor, the Hon. C. J. Doyle, the Department has been able to make a magnificent showing. Most any sort of man is able to float down stream, but it requires a real genius to build up from nothing a magnificent, fully equipped high power Department which can render a real public service to the community at large. A truly great American, working under high pressure is a great machine in these days where competition is so keen along every line of endeavor, and it is only the truly great man who is

able to outstrip his competitors, and open up and develop new and important lines of usefulness.

I believe that the State Fire Marshal Department of Illinois is a mighty useful and valuable department of public work. I believe it has accomplished great good. I believe there are still greater possibilities in the future, and larger and still more important fields to be entered and results to be obtained, and it shall be my earnest endeavor, in administering the affairs of this Department in this great State of Illinois, to place the Fire Marshal Department at the head of all like institutions and Departments in America. I believe it is a laudable ambition, and an object worthy of the attention, the time, and the talents of any man. I believe that the field of possibility is very large, and that the opportunity is here for doing great things in the conservation and preservation of the assets of this State. The protection and preservation of property is an important thing, but the protection and preservation of human life is, in my judgment, a still greater and more important thing; and it shall be my earnest endeavor to use every agency at my command, that will result in the doing of these two things.

I am constrained to believe that the people of our State do not appreciate the magnitude of the work in which we are engaged, nor do they have any real conception of the relation that exists, or ought to exist, between this Department and the people generally. One thing that ought to arrest the attention of the people of the State of Illinois in respect to this tremendous problem which is engaging our attention today, is to be found in a few figures which constitute such an important feature in the summary of the report of this Department for the past year. This brief statistical statement shows that altogether the average annual per capita fire loss of the most important countries of continental Europe is less than fifty cents, and that the average per capita loss in the State of Illinois for the year ending December 31st, 1913, was \$2.42.

This vast difference in favor of the countries of the old world is not the result of chance, but is entirely the result of a literal application of the same principles which the State Fire Marshal Department of Illinois has promulgated in recent years, and we have a right to conclude that the same results could be obtained in our own State if the people of this commonwealth would be willing to apply these same rules of protection, carefulness and reasonableness, in safe-guarding and surrounding their own property from the great ravager of flames, which is so rampant in our state today.

A careful observation and compilation of the reports of the fires in the State of Illinois for the past year, leads me to the conclusion that a large proportion of this great fire waste is occasioned by criminal carelessness and criminal incendiarism. If these two elements could be eliminated the loss would decrease in such amazing proportions as to make the result astounding indeed.

Because of this fact the Fire Marshal's Department naturally divides itself into two parts; and we are today following two distinct lines of work in carrying out the great mission the Legislature had in view when the Department was established, namely: The Department of fire prevention, embracing a thorough and complete inspection of fire risks, and the education of the public along the line of the best methods of fire prevention; and,

secondly: the investigation and prosecution of those cases arising from criminal incendiarism, occasioned by the greed of a criminal class that is bent on obtaining money irrespective of the means employed.

I take it that it might be interesting for me to briefly call your attention to a part of the work of the State Fire Marshal Department of Illinois for the past year. There was reported to our office in 1913, a total of 8,432 fires, entailing a fire loss of \$13,666,438, or an average loss of \$1,620 per fire. These fires resulted from various causes such as defective flues, carelessness with matches, overheated stoves, gasoline explosions in stoves and otherwise, lightning, etc. Of the total number 2,637 fires were reported as of unknown origin, and 311 fires were of criminal incendiary origin.

The Federal census of 1910 gives Illinois a population of 5,638,591. It will thus be seen that the per capita fire loss in the State of Illinois, is about \$2.50. When you stop to think that in order to replace the fire loss in Illinois, in any one year it would require every man, woman and child living in the great State of Illinois to contribute \$2.50 each, we begin to recognize the magnitude of this awful wastefulness.

Our Department by means of a campaign of education, has endeavored to lessen this tremendous fire waste by arousing the people to a sense of their individual responsibility in the matter.

Every destruction of an asset irrespective of what it embraces, is a distinct loss to the person or community suffering the same. It a man's earning capacity is taken away from him in any manner, that is a distinct loss to that person as well as to the persons dependent upon him.

As in all other branches and departments of life, there are greater and lesser degrees of loss. A man may be operating on the Board of Trade and lose a thousand dollars one week and make it back the next. This is an even break. A man may be engaged in a mercantile business and lose money one month and make it back the next. These losses are not irretrievable. But any loss which absolutely blots out of existence any material thing, is a real loss, as distinguished from a temporary one. The loss of a man's life is a real loss to the value of that life. The loss of any sort of property by fire is likewise a real loss, because that property so destroyed can never be replaced. It is irretrievable, and is wiped from the face of the earth forever.

The fact that property which has been destroyed by fire may be insured, and the owner receive some money compensation therefor, in no way changes the condition that the property asset is forever destroyed; and the fact that he receives insurance money is simply and solely the process of taking that money out of your pocket and my pocket in premiums, and turning it over to him as our contribution toward his misfortune. The money that he received as insurance money is lost to us for all times. In other words it is purely and simply a mutual contribution, made by members of a mutual organization, as a relief from temporary misfortune.

A few days after taking up the work of this Department, I was in the City of Chicago becoming acquainted with our work there. At about nine o'clock on a bitterly cold night an alarm of fire was sounded from the south side and upon the arrival of the fire department a large magnificent apartment house on Oakwood boulevard was found to be in flames. Within the

next hour \$400,000 worth of property was destroyed and one hundred families turned out in the street. The day before had been warm and pleasant, and a sudden drop to zero weather that day caused intense suffering among these people, thrown out of doors in the middle of the night. Upon an investigation I found that a careless janitor had thrown hot ashes and cinders near a pile of rubbish, and thus destroyed this beautiful building and imperiled the lives of three or four hundred people.

About a year ago I stood in the streets of my home city of Quincy, in company with thousands of others, and gazed upon one of the most spectacular exhibitions of this magnificent calamity that any person is ever permitted to witness. Early in the evening an alarm of fire was sounded in every engine house, and the fire equipment of the entire city was soon assembled in the heart of the manufacturing district, where a conflagration was raging that resulted in the destruction of \$500,000 worth of property. As I gazed at that spectacular exhibition of the mighty power of flames turned loose, I recognized how utterly helpless are all human agencies when directed against influences so overpowering as to command the admiration of every generation and of all people. Brave and heroic firemen battled against terrific odds for the preservation of a magnificent, modern, well equipped, handsome manufacturing plant. They were utterly helpless to stay the ravages of the fire monster, and in a short time a plant in which was involved a fortune, and which had required many years to build up, was utterly desolated and laid to waste.

This sort of thing is happening almost every day over the fertile prairies and in the beautiful cities of this great commonwealth, and it does seem to me that the people of our State can well afford to direct their attention and give a portion of their time to the formulating and promulgating of any agency will have a tendency to diminish this tremendous waste.

This, however, is only one side of our work, and the least important one for the reason that in this fire which wiped out this magnificent building and contents, there was not a life lost, nor a person injured.

Two or three years ago there was another incident which happened in my home city to which I desire to call your attention, which left a pall and blight upon the community from which it has not yet recovered, and from which the persons directly interested therein never will recover. It was the day before Christmas; the time of year that naturally presents to one an occasion of joy and festivity; the time of year when peace and good will is everywhere prevalent, and when there radiates from all hearts the largest element of human kindness. The occasion was a Christmas celebration in a public school. Upon the platform in the assembly hall of that building had been erected a magnificent Christmas tree, decorated with wreaths of holly and sprigs of mistletoe, and filled with presents for the children who were expected to take part in the festivities of that hour. The platform was covered with cotton to represent snow and the tree was beautifully illuminated with flickering candles, and glittering ornaments. In a short time the assembly room began to fill with the parents and friends of the children who were to participate in this gala occasion. Very soon the exercises were in full sway, and amid the declamations of the children and the applause of the parents and friends, the unexpected happened. It is always the unex-

pected that causes the trouble; it is the happening of things that we are not looking for that disarranges the plans that man makes. The lighted candles ignited the cotton and inflammable ornaments, and immediately there was a great blaze. The children on the platform were thrown into confusion. The flames encircled and enwrapped them about, and amid the shrieks of terror from the victims, and the wails of horror from the parents, twelve innocent children and two helpless teachers laid down their lives upon that platform that day as a sacrifice to the fire god, and all that now remains as a sad memorial of that Christmas festival, is a shaft in the cemetery pointing heavenward surrounded by fourteen graves in which are buried the fond hope and expectancy of that school.

As we contemplate this awful spectacle, we wonder why it is that day after day and year after year helpless victims are compelled to surrender their lives through man's criminal carelessness; why it is that after so many repeated catastrophes of this kind, that men and women persist in endangering the lives of innocent children during this festal week by exposing them to this awful danger. It seems to me that people never will learn that an ounce of prevention is worth a good many pounds of cure.

Fire is an awful thing. The destruction of property is a lamentable calamity. And above everything else the appalling loss of life is the most terrible thing which we have to contemplate in our work.

A fire is a peculiar and attractive thing. A large fire is one of the most awfully spectacular sights that a person is ever permitted to witness on this earth.

Since the beginning of time, or rather since large number of people began to associate themselves together in cities, conflagrations have ever been a startling event of these communities, and very often indeed have these conflagrations been attended with tremendous destruction of life as well as property. Some of these great epoch events have been caused by war, others by incendiarism, and others by the lack of proper precaution or protection, or the lack of efficiency in dealing with these casualties. As we think of some of the great fires in history our minds immediately revert to the burning of Rome in the first century, when Nero, because of his perverted mind and great greed for sensationalism, sat calmly by and witnessed the destruction of that great city; and again to the great fire in London in the 17th century where millions of dollars worth of property, and scores of human lives were sacrificed upon the altar of this dread monster; and in our own beloved country where we think of the great fires of Boston, Baltimore, San Francisco, and Chicago.

Who of you that have read of the great Chicago fire have not been astounded and amazed at the awful destruction that can be wrought in a little while by the fire demon when once it gets beyond human control. This awful spectacle is well nigh indescribable. From what I have been able to gather from newspaper writers who were on the ground at the time, this tremendous conflagration started on Sunday evening at the close of a peaceful Sabbath day. As people were returning to their several homes from evening worship, a bright illumination appeared in the southwest sky; and while they recognized that a fire was raging somewhere in the city, it was not of such a character as to prevent a large proportion of them from returning to their homes and retiring for the night. I am told that never be-

fore or since in the history of that windy city, has the wind ever attained the velocity and violence that it did on that occasion. Instead of being an ordinary gale, it is said to have been a veritable tornado; a regular old fashioned sou'-wester, which acted upon the flames as a blow pipe to a furnace, and drove the sheets of fire onward in their devastating way, faster than the firemen could retreat. Any attempt to check the onward movement of this devouring monster, proved as futile as would the hand of a child to stay the roaring of a tempestuous and storm capped waves on a rocky beach. The huge stone and brick structures lying in the path of this unnatural enemy, melted before the fierceness of the flames as snow flakes melt and disappear in water, and almost as quickly. Six story buildings would take fire and disappear from sight almost instantaneously. In nearly every street the flames would enter in the rear of the buildings and appear almost simultaneously in the front. For an instant the windows would redden, then great billows of fire would belch out and shoot up into the air, a vivid, quivering column of flame, and, poising in awful majesty, hurl itself bodily several hundred feet in advance and kindle new buildings. The general direction of the wind being from the southwest, the fire was carried straight through the heart of the city from southwest to northeast, cutting a swath a mile in width, and then, as if angry and disappointed in missing any of its prey, would turn back in its awful frenzy and face the fierce wind as if to demonstrate its power over the elements of God, mowing down wide fields on either side of its original path.

At times the wind would seize the entire volume of fire on the front of one of the large blocks, detach it entirely, and hurl it on beyond in fierce masses of heat and flames, leaving the building as if it had been untouched—for an instant only, however, and then fresh gusts of fire would once more wrap the buildings in sheets of flame. The heavens were filled with glowing embers looking like an illuminated snow storm. Again capricious furies of gale would send these fire messengers many blocks away in their work of destruction and dash them to earth, firing everything they touched. Strange fantastic fires of blue, red and green played upon the cornices of the building; and on the bank of the river red hot walls would fall sending up great columns of spray and exposing the fierce white furnace heat of this appalling fire. If the sight was grand and overpowering, the sound was no less so. The flames crackled and growled and hissed and roared again and again. The limestone fronts of many buildings, as soon as they were exposed to heat, flaked off, and the fragments would fly in every direction with a popping noise like that of the continuous discharge of musketry. Almost every instant was heard the dull heavy thud of falling walls which shook the earth and sounded like distant cannonading, and above all these sounds there was one other which was terrible in its fascination, and awful in its constancy, and that was the continual roar of the advancing flames—the awful diapason of this carnival of fire. It was like nothing else on this earth so much as the combined roar and howl of the ocean, coupled with the blasts of the angry wind, on a storm and rock bound coast.

It is impossible to convey by words, much of an idea of the distressing scenes in the streets. The struggling of humanity was more fearful than the horrors of the fire. The human mind is so constituted that it cannot get

away from the beautiful and sublime as pictured in the raging fire illuminated against the dark sky; but there is nothing beautiful nor sublime nor picturesque in a howling, struggling mass of frightened and emotional men, women and children. The utmost disorder and excitement prevailed. Mobs of men and women rushed from street to street screaming, and shouting, crossing each other's paths, intercepting each other in mad confusion. Elegant ladies who had never lifted an ounce in their lives could be seen dragging and carrying heavy loads for long distances; delicate girls with red eyes and blackened faces, toiled hour after hour to save their belongings; poor women struggled along with arm loads of household goods, only to be abandoned as their strength failed. Every few steps along the Avenues there were piles of personal belongings abandoned because of the necessity for personal safety. Here would be a woman weeping and tearing her hair and calling for her children in utter despair; here children hand in hand separated from their parents and crying with the heart broken sorrow of childhood; here a woman kneeling on the hot ground and praying with her crucifix before her; here a man seated upon what he had saved but bereft of his senses. Thieves pursued their profession with perfect impunity. No man has ever been able to describe more than a fraction of all the horrors of that great fire during that awful day and night of devastation. No man will ever know more than a small per cent of the suffering and loss entailed by that awful calamity. Fire is a monster of so frightful mien as to be dreaded, needs but to be seen.

I desire to now discuss with you for a few moments one of the unpleasant features of the Department with which I have the honor to be connected. The work of the Fire Marshal brings him into connection with a great many agreeable and pleasant things, and a great many agreeable and pleasant people; and it would indeed be a strange and unusual condition of human life if we were permitted to pass along from year to year and see only the beautiful and pleasant, and kindly things of this world, and not be forced to come in contact with the disagreeable, ugly and unkind things. And so in the discharge of the duties of this office we are brought in contact from time to time with a criminal class, whose insidious avocation is often clothed with the cloak of respectability. The human heart is so constituted that it is subject to temptation, and men are sometimes tempted to acquire honor, ambition or wealth by unholy means; and in our Department we come in contact with a class of men who are bent upon securing money without an adequate outlay of labor; men who will resort to crime of the most ignoble type, in order that they may obtain a few paltry dollars.

A few days ago a daily newspaper in one of the prominent cities of Illinois published an editorial as follows:

"If it is true that is harboring a nest of fire starters, the quicker we are rid of them the better.

"In the whole category of crimes that of arson is among the worst, because it always involves the possibility of taking human life.

"No death is more horrible than that resulting from burns and every time the fire alarm is turned in there is an opportunity for a fatality.

"Revenge certainly cannot be the motive back of these frequent blazes in this city. If it is done for the purpose of collecting the insurance or

something similar, it is nothing less than robbery and it is to be hoped that the perpetrator will be discovered at once and given proper punishment."

The law makers of our country regard crimes as subject to certain classification. We look with horror upon the man who takes the life of a fellow man. We say that he is guilty of murder, and the punishment meted out to him as a murderer, is the greatest punishment known to human law.

Our forefathers in establishing this country and giving birth to a new nation which should come to us as a rich heritage of freedom and equality, recognized another crime on an equal basis with murder, and that is the crime of treason against the government; and the laws of our land declare that whosoever shall be guilty of treason against the country that affords him protection and permits him to exercise whatever functions he possesses with perfect freedom, shall be punished by death. It is universally held to be the law that a man guilty of either the crime of murder or treason, may be apprehended and punished at any time during the term of his natural life. In other words the statute of limitations does not run against either of these crimes.

The law of Illinois likewise recognizes the crime of arson to be on a parity with murder and treason, because it provides that an indictment for arson may be had at any time after the committing of the crime and without regard to the time which shall elapse between the commission of the offense and the arrest of the offender. A man who commits the crime of arson is a cold, deliberate, perverted criminal. The crime of arson cannot be committed in the heat of passion; it cannot be committed by accident; nor can it be committed unintentionally. A man who will deliberately set fire to his, or another man's property for the purpose of destroying the same, is a man possessed of a wicked, malignant, felonious heart and conscience.

I am very sorry to say that we have such men in Illinois; that the ramifications of what is commonly known as the Arson Trust, or those organized bands of miscreants who fire property in order to obtain insurance money and to defraud insurance companies, or to avenge a fancied wrong, are far too numerous.

In entering upon the duties of my office, one of the very first things I was called upon to do, was to assist in the prosecution of one of the most notorious gangs of criminal plunderers, which at the present time disgraces the fair name of our beloved State, and I am delighted to say that this prosecution was in the courts of my home city. Harvey A. Six of Springfield, and Hugh A. Brady, of Decatur, were indicted by the grand jury of Adams County, a few days after my appointment as State Fire Marshal. One of these men has quite a notorious record in connection with incendiary fires, having been convicted and sentenced to the penitentiary for complicity in the burning of the Aldine Hotel in Peoria a couple of years ago. In working out another crime they carried their conspiracy into my city for the purpose of completing it, and of destroying one of the most beautiful suburban homes in the State of Illinois. I trust and fully expect that their nefarious career is at an end. It shall be my purpose to relentlessly pursue every fire bug in Illinois, until this unholy practice shall be broken up, and the State of Illinois freed from the operations of this criminal class.

If I had the time it would be mighty interesting to discuss with you

some of the acts leading up to, and some of the plots uncovered by our Department with reference to these arson fiends.

During the time that I shall be permitted to serve the great State of Illinois at the head of the Fire Marshal Department, it shall be my object to administer the affairs of this office vigorously, fearlessly, equitably, intelligently, if I can, and without favor to any person. People who do right and are square with their fellow men do not want favors from public officers. People who do wrong and are not square are not entitled to favors from public officials, and will receive none from me.

I do not propose that there shall be one law for a rich man, and another law for a poor man; one law for the man of influence and another law for the man without influence; one law for the politician and another for the business man. I am a firm believer in the old fashioned democratic doctrine, of equal and exact justice to all men, irrespective of creed, color, or condition.

I apprehend that you are about ready to ask me a very pertinent question, namely: What are you going to do about it? Granted that all you say about this tremendous fire waste is true, and that there should be something done immediately looking toward the prevention of this great destruction of property and the tremendous sacrifice of human lives. Granted that there exists in this State today a condition that ought not to exist, and that the resources that men have been so many years in building up, are being unnecessarily depleted. Granted that all these things are true, the most relevant question that you can ask, and that you have a right to ask, is, what are you going to do as a remedy for this existing evil.

I will endeavor to tell you in a few words as near as I can, some of the things the Fire Marshal Department of Illinois is endeavoring to do as a specific remedy.

You will remember that I told you in the beginning that our Department embraces a line of work in the nature of trying to educate the people, and bring to their notice certain facts and conditions which we believe are not generally known to the public. This campaign of education is being carried on in a number of ways. We are today printing and furnishing free of charge to every newspaper in the State of Illinois a weekly news bulletin, calling the attention of the people to some specific condition that usually exists in every community which is likely to cause fires, and which ought to be remedied wherever found to exist; calling attention to numberless fires that are caused by the absolute carelessness of the individual citizen; calling upon the individual citizen to remedy these conditions wherever they are found to exist on his premises.

We are endeavoring to also carry this campaign of education into the public schools of this State in order that the children will recognize that they can have a large part in this preventable campaign.

Through the help of the Governor and the State Superintendent of Public Instruction, one day in the year, usually the anniversary of the great Chicago fire, is set aside to be known as Fire Prevention Day in school. Special exercises are held and the startling conditions and facts surrounding our work are brought to the attention of the children, and they are asked to become agents in their homes to carry the warning which we believe will

result in great good. Another thing that I propose to carry out just as soon as I can reach it, is to organize the Boy Scouts of Illinois as special patrol boys, whose duty and privilege it shall be to report every condition that shall come to their notice as a fire hazard, in order that it may be speedily remedied. I believe that by educating the children along these lines of work, that when they assume the responsibility of citizens our work will then become much easier, and the State of Illinois will have advanced many strides toward conquering the awful destruction of the flames.

Again, we are holding all over the State of Illinois, meetings similar to this one here today, in an endeavor to bring to the notice of these respective communities, specific instances which are apt to produce fires, and which, if remedied, or removed, would help to lessen the fire hazard. Our reports show that over ten per cent of the fires in the State of Illinois are caused by defective chimneys, a condition that can be very easily remedied if in the fall of the year before the furnace or stoves are started, you would take the time to examine your chimneys and put them in first class condition. We find that five per cent of the fires in Illinois are caused by absolute carelessness of some member of the family in allowing the stoves and furnaces to become overheated and thus starting a fire; we find that fifteen per cent of the fires of the State are caused by the careless handling of matches; we find that more than five per cent of the fires in this State are caused by the careless handling of gasoline, notwithstanding the fact that everybody recognizes the fact that gasoline is a dangerous thing. Every casualty resulting therefrom can usually be attributed to the carelessness of the person handling this dangerous fluid.

These are some of the things we are warning the people against from day to day and from time to time. We say that this unwarranted fire waste in the State of Illinois is largely a question of individual responsibility. We maintain that if the citizens of Illinois would recognize their individual responsibility in this matter, and would use ordinary judgment along these lines, that the fire waste in this State would more than be cut in half; that you men who are sitting here tonight, together with all other citizens of Illinois, hold within your hands the means and agencies which will do the very things we are talking and preaching all over the State. If the business men of this State would use more precaution in cleaning up rubbish from their work rooms and basements, and would forbid smoking where inflammable material is stored, and would not allow their electric wiring to become defective, and would provide a metal receptacle for ashes, and would just use ordinary judgment in keeping their property free and clear from hazardous conditions, we would have no trouble in obtaining results along the lines of our endeavor. As soon as these things are done or as soon as the citizens of Illinois recognize that it is a part of their civic duty to help prevent this large waste, a direct monetary gain will result therefrom, and that ought to interest you if nothing else will.

The prudent and conservative business man recognizes the fact that he cannot afford to do without insurance on his property. In order to obtain this insurance it is necessary for him to pay out a certain amount of money. The amount of money that is paid out in any community for insurance depends entirely on what we call the fire hazard. Your rates are made and established on certain local conditions and as soon as you are able to show

the National Board of Fire Underwriters that your community has raised itself from a condition of carelessness and ignorance along these lines, you will find that they will be more than willing to repay you by lessening your insurance rates. There isn't an insurance company on earth but what would much prefer writing a good risk in a good locality and free from hazardous conditions at a nominal rate, than to do business in a hazardous community at an extremely high rate.

I trust that you will ponder well the suggestions that you have received in these meetings today, and that you will profit thereby; believing as I do that a very material benefit will accrue to you by a practical application of some of these preventive measures of which you have learned today.

I desire to say in conclusion that I appreciate very much the magnificent attention you have given me tonight, and I want you to know that the Fire Marshal Department of Illinois stands ready to assist in any way it can in order to be of real benefit to every community in this great State of Illinois along the line of fire prevention.

Our work is your work. Our interest is your interest. Our success is your success. Come, then, let us all pull together for an awakened public conscience, and a public pride that shall make your city, the fairest, and noblest, and cleanest city beneath the stars.

STATE FIRE MARSHAL LAW

[Approved June 15, 1909, in force July 1, 1909.]

An Act Creating the Office of State Fire Marshal, Prescribing His Duties and Providing for His Compensation and for the Maintenance of His Office.

State Fire Marshal.—Appointed for Four Years' Term.—Bond.

Section 1. Be it enacted by the People of the State of Illinois represented in the General Assembly:—That the Governor is hereby authorized and empowered to appoint within sixty days after this Act shall take effect, and every four years thereafter, between the 15th day of January and the 1st day of February, by and with the advice and consent of the Senate, and also within thirty days after the occurrence of a vacancy in the office, a suitable person who shall be a citizen of this State, as State Fire Marshal, who shall give bond in the penal sum of \$5,000, with not less than two sureties conditioned for the faithful performance of the duties of his office, to be approved by the Insurance Superintendent, who shall devote his whole time to the duties of his office, and who shall hold office until his successor is appointed and qualified, the title of which office shall be State Fire Marshal. Such officer shall keep his office at the capitol in the City of Springfield, and may be removed for cause at any time by the Governor.

Duty of Chief Assistant and Deputy to Assist State Fire Marshal.

Section 2. The State Fire Marshal is hereby empowered and required to appoint two deputy fire marshals to be designated as first and second deputies, and one chief assistant. The duties of said deputies and chief assistant shall be to assist the State Fire Marshal, and such appointees may be removed for cause by the said Fire Marshal.

Duties of Fire Marshal Performed by First Deputy.—When.

Section 3. In the event of a vacancy in the office of Fire Marshal, or during the absence or disability of that officer, the first deputy marshal shall perform the duties of the office.

Deputy State Fire Marshals and Office Assistants.

Section 4. The State Fire Marshal is hereby empowered to appoint such additional deputy fire marshals and such office assistants as may be necessary for the proper and efficient conduct of his office.

Special Inspectors Skilled in Business of Fire Insurance.—Powers.

Section 5. The State Fire Marshal may, in addition to the provisions of Section 4, appoint any person as inspector who may be known to him to be competent and skilled in the business of fire insurance and in the inspec-

tion of buildings and their contents. Such persons shall have all the powers of other deputies to enter and inspect buildings, including their contents and occupancies, as provided under Section 9, and it shall be the duty of such inspectors to report to the Fire Marshal any faulty or dangerous conditions found. Such deputy inspectors to be duly commissioned and serve without compensation.

City, Village and Township Officers Required to Make Fire Reports and Investigate Causes.

Section 6. The State Fire Marshal and the chief of the fire department of every city or village in which a fire department is established, and the mayor of every incorporated village or town in which no fire department exists, and the township clerk of every organized township without the limits of any organized village or city, shall investigate the cause, origin and circumstances of every fire occurring in such city, village town or township by which property has been destroyed or damaged, and shall especially make investigation as to whether such fire was the result of carelessness or design. Such investigation shall be begun within two days, not including Sunday of the occurrence of such fire, and the Fire Marshal shall have the right to supervise and direct such investigation whenever he deems it expedient or necessary. The officer making investigations of fires occurring in cities, villages, towns or townships shall forthwith notify said Fire Marshal and shall within one week of the occurrence of the fire, furnish to the said Fire Marshal a written statement of all the facts relating to the cause and origin of the fire, and such other information as may be called for by the blanks provided by said Fire Marshal. The State Fire Marshal shall keep in his office a record of all the fires occurring in the State, together with all facts, statistics and circumstances, including the origin of the fires, which may be determined by the investigations provided by this Act; such record shall at all times be open to the public inspection, and such portion of it as the Insurance Superintendent may deem necessary shall be transcribed and forwarded to him within fifteen days from the first of January of each year.

Testimony Under Oath.—Arrest.—Prosecutions.—Reports to Insurance Superintendent When Required.

Section 7. The State Fire Marshal shall, when in his opinion further investigation is necessary, take or cause to be taken the testimony on oath of all persons supposed to be cognizant of any facts or to have means of knowledge in relation to the matter as to which an examination is herein required to be made and shall cause the same to be reduced to writing; and if he shall be of the opinion that there is evidence sufficient to charge any person with the crime of arson, or with the attempt to commit the crime of arson or of conspiracy to defraud, or criminal conduct in connection with such fire, he shall cause such person to be arrested and charged with the offense or either of them, and shall furnish to the proper prosecuting attorney all such evidence, together with the names of witnesses and all of the information obtained by him, including a copy of all pertinent and material testimony taken in the case, and shall report to the Insurance Superintendent, as often as such superintendent shall require, his proceedings and

the progress made in all prosecutions under this Act, and the results of all cases which are finally disposed of.

Power to Compel Witnesses to Attend and Testify.—Penalty for Violations.

Section 8. The State Fire Marshal, Deputy State Fire Marshals and Chief Assistant Fire Marshal, shall each have power in any county in the State of Illinois to summon and compel the attendance of witnesses before them, or either of them to testify in relation to any matter which is by the provisions of this Act a subject of inquiry and investigation, and may require the production of any book, paper or document deemed pertinent thereto by them or either of them. Said State Fire Marshal, Deputy State Fire Marshal and Chief Assistant Fire Marshal are each hereby authorized and empowered to administer oaths and affirmations to any persons appearing as witnesses before them, and false swearing in any matter or proceeding aforesaid shall be deemed perjury and shall be punished as such. Any witness who refuses to be sworn or who refuses to testify, or who disobeys any lawful order of said State Fire Marshal, Deputy State Fire Marshals or Assistant Fire Marshals or who fails or refuses to produce any book, paper or document touching any matter under examination, or who is guilty of any contemptuous conduct after being summoned by them or either of them, to appear before them, or either of them, to give testimony in relation to any matter or subject under investigation as aforesaid, shall be deemed guilty of a misdemeanor and it shall be the duty of the State Fire Marshal, Deputy State Fire Marshal or Chief Assistant Fire Marshal, or either of them, to make complaint against said person or persons so refusing to comply with the summons or order of said State Fire Marshal, Deputy State Fire Marshals or Chief Assistant Fire Marshal, before any justice of the peace, police magistrate, or in any court of record in the county in which said investigation is being had, and upon the filing of such complaint, such cause shall proceed in the same manner as other criminal cases, and upon conviction any such person guilty of a violation of the provisions of this Act shall be fined in a sum not exceeding twenty-five dollars (\$25.00) and imprisoned until such fine is paid: Provided, however, that any person so convicted shall have the right of appeal. Said State Fire Marshal and his subordinates, or either of them, shall have the authority at all times of day or night, in the performance of the duties imposed, by the provisions of this Act, to enter upon and examine any building or premises where any fire has occurred, and other buildings and premises adjoining or near the same. All investigations held by or under the direction of said State Fire Marshal may, in his discretion, be private, and persons otherwise than those required to be present by the provisions of this Act, may be excluded from the place where such investigation is held, and witnesses may be kept separate and apart from each other and not allowed to communicate with each other until they have been examined.

Inspection of Buildings.—May Order Repair and Removal of Dangerous Conditions.—Appeal.—Penalty.

Section 9. The State Fire Marshal, his deputies and assistants, the chief of the fire department of all villages and cities where a fire department is established, and the mayor of cities or villages where no fire department

exists, and the clerks of each township in the territory without the limits of an organized city or village, upon complaint of any person having an interest in any building or property adjacent, and without any complaint, shall have a right at all reasonable hours, for the purpose of examination, to enter into and upon all buildings and premises within their jurisdiction. Whenever any said officers shall find any building or other structure, which for want of proper repair, or by reason of age and dilapidated condition, or for any cause, is especially liable to fire, and which is so situated as to endanger other buildings or property, or so occupied that fire would endanger persons or property therein, and whenever any such officers shall find in any building, or upon any premises combustible or explosive material, or inflammable conditions, dangerous to the safety of said buildings or premises, they shall order the same to be removed or remedied, and such order shall be forthwith complied with by the owner or occupant of said buildings or premises: Provided, however, that if the said occupant or owner shall deem himself aggrieved by such order he may within ten days appeal to the State Fire Marshal and the cause of complaint shall be at once investigated by the direction of the latter, and unless by his authority the order is revoked, such order shall remain in force and be forthwith complied with by said owner or occupant. Any owner or occupant of building or premises failing to comply with the orders of the authorities above specified shall be punished by a fine of not less than ten dollars (\$10.00), nor more than fifty dollars (\$50.00) for each day's neglect; such penalty to be sued for in the name of the People of the State of Illinois, upon the complaint of the Fire Marshal, Assistant Fire Marshal, or the State's Attorney, or any officer named herein, in the county in which such building or buildings shall be situated, before any justice of the peace or in any court of record, with right of appeal, and such penalty when recovered shall be paid into the county treasury of the county wherein such recovery is had: Provided, however, that in municipalities having building inspection and fire limits ordinances, nothing herein shall be construed to affect such local regulation, but the jurisdiction of the State Fire Marshal shall in such case be concurrent with that of the municipal authorities.

Fine for City, Village and Township Officers for Neglect to Make Reports on all Fires.

Section 10. Any officer referred to in section 6 herein who neglects to comply with any of the requirements of this Act, shall be punished by a fine of not less than twenty-five dollars (\$25.00) nor more than two hundred dollars (\$200.00)), to be recovered as provided in section 9 of this Act.

State Officers.—Salaries Fixed by Law.

Section 11. The State Fire Marshal shall receive an annual salary of \$3,000, the Assistant Fire Marshal \$1,800; First and Second Deputy Fire Marshals, \$1,500 each. Said Fire Marshal shall employ additional deputies, clerks and assistants and incur such other expense as may be necessary in the performance of the duties of the office, not to exceed, including salaries, such sum as may be paid to the Insurance Superintendent in the manner hereinafter provided.

Revenue for the Maintenance of Fire Marshal Department.—How Provided.

Section 12. For the purpose of maintaining the office of the State Fire Marshal and paying the expenses incident thereto, every fire insurance company whether upon the stock or mutual plan, and all individuals, firms, corporations, associations or aggregation of underwriters doing business in the State of Illinois, shall pay to the Insurance Superintendent of the State of Illinois in the month of February annually, in addition to the taxes now required by law to be paid by such companies, associations, partnerships, firms, or individuals, not exceeding one-fourth of one per cent of the gross premium receipts of all such companies, firms, individuals, associations or partnerships on all business done in the State of Illinois during the year preceding or such portion of the year as this law may have been in effect as shown by their annual statement under oath to the Insurance Department, in case such company, association, firm, partnership or aggregation of underwriters is now required by law to make such annual report or does make such report, but it is expressly provided that from and after the taking effect of this law every such company, firm, partnership, association, or body of individuals acting as underwriters or insuring each other, no matter how or under what form the business of fire insurance is done, shall annually report to the Insurance Superintendent the gross premiums received for the year or portion of year preceding, and shall during the said month of February of each year, pay to the Insurance Superintendent such amount as may be assessed, not exceeding one-fourth of one percent of such gross premium receipts, as hereinafter provided. The Superintendent of Insurance shall cover the money so received into the State treasury as a special fund for the maintenance of said office of Fire Marshal and the expense incident thereto. Any portion of said special fund remaining unexpended at the end of any fiscal year not needed for the maintenance and expense of the Department of Fire Marshal shall be carried forward to the next fiscal year and the next assessment correspondingly reduced. The said Fire Marshal shall keep on file in his office an itemized statement of all expenses incurred by his department and shall approve all vouchers issued therefor before the same are submitted to the Auditor of State for payment, which said vouchers shall be allowed and paid in the same manner as other claims against the State.

Penalty for Failure of Fire Insurance Companies to Pay Tax.

Section 13. Every company, firm, co-partnership, association or aggregation of individuals, or body of persons insuring each other, or their agents, representatives or attorneys in fact who shall refuse or neglect to comply with the requirements of section 12 of this Act, shall be subject to a penalty of not less than one hundred dollars (\$100.00) nor exceeding five hundred dollars (\$500.00) recoverable in an action of debt at the suit of Attorney General, Insurance Superintendent, or State's Attorney of the county in which the principal office of the firm, association, corporation, individual or co-partnership is situated, and if such violation is by a company, association, co-partnership or aggregation of individuals licensed to do business in the State of Illinois, such license may be revoked by the Insurance Superintendent and penalties recovered under the provisions of this Act shall be paid into the county treasury of the county in which such recovery is had.

Fire Marshal.—Duties.

Section 14. The State Fire Marshal shall not engage in any other business, and he, or one of his deputies, shall at all times be at the office of the Fire Marshal ready for such duties as are required by this Act.

Annual Report.

Section 15. The Fire Marshal shall submit annually, as early as consistent with full and accurate preparation, and not later than the first day of February in each year, a detailed report of his official actions to the Insurance Superintendent, and there shall be included in the annual report of such Insurance Superintendent such portion of the report of said Fire Marshal as shall be deemed desirable by such Insurance Superintendent.

Fees and Mileage for Reporting Fires.—When Paid.

Section 16. There shall be paid to the chiefs of fire departments, and to mayors of incorporated villages, who do not receive compensation for their services as such chiefs and mayors, and to the township clerk of every organized township, who are by this Act required to report fires to the State Fire Marshal, the sum of fifty cents for each fire so reported to the satisfaction of the State Fire Marshal, and in addition thereto mileage at the rate of fifteen cents per mile for each mile traveled to the place of fire. Said allowance shall be paid by said State Fire Marshal at the close of each fiscal year out of any funds appropriated for the use of the office of said State Fire Marshal.

FIRE FOREVER DESTROYS AN ASSET WHETHER INSURED OR NOT

The fact that property which has been destroyed by fire may be insured, and the owner receive some money compensation therefor, in no way changes the condition that the property asset is forever destroyed; and the fact that he receives insurance money is simply and solely the process of taking that money out of your pocket and my pocket in premiums, and turning it over to him as our contribution toward his misfortune. The money that he receives as insurance money is lost to us for all time. In other words it is purely and simply a mutual contribution, made by members of a mutual organization, as a relief from temporary misfortune.

The following comprise the roster of officers and employes of the State Fire Marshal Department:

SPRINGFIELD OFFICE

WALTER H. BENNETT,
State Fire Marshal.

F. R. MORGARIDGE,
Assistant State Fire Marshal.

W. S. HOOPES,
First Deputy State Fire Marshal.

MISS MAE SMITH,
Stenographer.

MISS MARY GORMAN,
Stenographer.

MISS NELLE SUTTON,
Statistician.

ALEX. PERRY,
Janitor.

FIELD DEPUTIES.

D. N. BLAZER, Aledo.

A. H. BOGARDUS, Springfield.

TONY BRUCKS, East St. Louis.

FRANK EASLEY, Benton.

J. E. GALLIVAN, Champaign.

DENNIS C. GIBBONS, Deerfield.

ROBERT HARPER, Rock Falls.

EDWARD HOLLAND, Bloomington.

S. LEGREID, Centralia.

R. B. LYTTON, Metropolis.

L. C. McMURTRIE, Lacon.

HARRY MOSS, Paris.

JOHN H. RICHARDS, East St. Louis.

THOS. P. F. REILLY, Edwardsville.

CHAS. J. ROBERTS, Champaign.

HENRY J. SLOAN, Danville.

CHICAGO OFFICE

A. A. BACH,
Chief Deputy State Fire Marshal.

FRANK L. SALISBURY.
Second Deputy State Fire Marshal.

MISS OLIVE M. WILHITE,
Stenographer.

MISS DELLA ELMER,
Stenographer.

DEPUTIES.

MARTIN DEVER,

MICHAEL J. DURR,

PATRICK GANNON,

THOMAS A. GREELY,

WILLIAM J. HANAFIN,

NEILS JUUL, JR.

AUSTIN P. LYNCH.

JOHN J. McKENNA.

THOMAS J. WALSH.

UNIVERSITY OF ILLINOIS
24 APR 1915

FOURTH ANNUAL REPORT

OF THE

STATE FIRE MARSHAL

OF THE STATE OF

ILLINOIS

FOR THE YEAR

1914

WALTER H. BENNETT,
State Fire Marshal.



WALTER H. BENNETT.
State Fire Marshal of Illinois.

THE ILLINOIS FIREMEN

To those men in the State of Illinois who are constantly on guard to protect the lives and property of the people of the State from destruction by fire, and who, since the organization of this Department have rendered to it invaluable service and loyal support, viz: THE ILLINOIS FIREMEN, is this, the fourth annual report of the State Fire Marshal of Illinois, respectfully dedicated.

LETTER OF TRANSMITTAL

Springfield, Ill., Feb. 1, 1915.

Hon. Rufus M. Potts,
Superintendent of Insurance,
Springfield, Illinois.

My dear Sir:

In compliance with the provisions of Section 15 of An Act creating the office of State Fire Marshal, prescribing his duties, etc., I have the honor to submit to you herewith the Fourth Annual Report of that Department; the same covering the period beginning January 1, 1914, and ending December 31, 1914, inclusive.

Very truly yours,

Walter H. Bennett

State Fire Marshal.

ANNUAL REPORT

FIRE MARSHAL DEPARTMENT

STATE OF ILLINOIS

In the preparation of this Annual Report it has been thought wise to divide it into five parts, namely: Part I.—Department of Publicity and Education. II.—Department of Inspection. III.—Department of Investigation. IV.—The Statistical Record. V.—Miscellaneous.

COMPARATIVE STATEMENT

A total of 11,605 fires was reported to the State Fire Marshal's office during the year 1914, as compared to 8,432 for the year 1913, an increase of 3,173 fires. This number of fires, however, does not represent in any degree the total number of fires which occurred in the State during the past year because of the fact that the officers reporting fires follow the practice of not reporting to this Department any fire in which there is no damage or a damage so slight as to be of little consequence.

The increased number of fires reported for the year 1914 represents more than any other one thing the increased efficiency of those officers whose duty it is to report fires to the Fire Marshal Department, rather than any material increase in the fire loss in the State.

I am convinced that the apparent increase in the fire waste in this State for the year 1914 is due to the fact that we collected and tabulated during that year certain classes of fires which had never before been reported to this Department, and in which no insurance was involved. For instance, there were 567 fires reported as having been caused by sparks from railroad engines and in which grain in fields or in stacks was destroyed, causing a loss of a quarter of a million dollars for this one class of fires. Such losses had not heretofore been reported.

I am satisfied that the insurance loss in the State of Illinois for the year 1914 will total at least a half million dollars less than it did in 1913, and I shall be very much disappointed if the difference in favor of the year 1914 is not considerably greater even than this.

Sparks arising from combustion caused 1,731 fires in the State of Illinois during the year 1914 and a property loss of \$873,379.

Chimneys, flues, stacks, etc., overheated or defective, caused 1,066 fires and a property loss of \$822,510.

Exposure, or, in other words, fires from adjoining buildings, caused 944 fires and a loss to property of \$1,044,751.

The careless use of matches was responsible for 821 fires and a loss of property to the value of \$360,645.

There were 696 fires caused by the careless handling of petroleum and its products—kerosene, gasoline, benzine, etc., and these fires caused a total property loss of \$1,216,506.

Five hundred seventy fires were reported to this Department as having been caused by lightning, and in view of the fact that most of the lightning fires occurred in the rural districts the losses were frequently total and the entire property loss in the State from this cause amounted to the enormous sum of \$1,035,936.

Stoves, furnaces, and boilers, overheated and defective, were responsible for 774 fires, which caused a loss of \$701,222.

Defective electric wiring caused 231 fires, entailing a property loss of \$636,015.

The fire loss in most of the large cities in the State of Illinois shows a material decrease for the year 1914. For the purpose of comparison we have tabulated the losses for the years 1913 and 1914 in those cities in Illinois of more than 15,000 population, and all but five of these cities show a material decrease for the year 1914. The only one of these cities which shows an increase of any consequence is the city of Decatur, and this city was especially unfortunate in being visited by a fire which entirely destroyed a large buliding called the Powers Building, which covered an entire block. This was an old-style building of four-story construction. The fire had gained considerable headway before it was discovered and it spread through the entire building so rapidly that it is exceedingly doubtful if all of the Fire Departments in the State could have saved the block from destruction after the fire was discovered.

The following is a comparative statement of the fire losses for the years 1913 and 1914 in those cities having a population of 15,000 or over, showing the increase or decrease for the year 1914:

	1913	1914	Decrease
Chicago	\$5,600,000	\$4,567,495	\$1,023,495
Quincy	504,000	97,536	406,464
Rock Island	342,000	30,206	311,794
East St. Louis	637,540	440,443	197,100
Springfield	276,136	108,359	167,777
Peoria	407,987	356,657	51,330
Freeport	53,808	8,609	45,199
Aurora	51,973	30,306	21,667
Rockford	59,464	17,784	41,679
Elgin	45,000	24,100	20,900
Belleville	32,000	16,000	16,000
Champaign	47,338	31,935	15,403
Moline	35,000	23,658	11,342
Chicago Heights	26,200	17,450	8,750
Alton	67,000	59,285	7,715
Bloomington	26,177	19,056	7,121
Oak Park	31,041	64,390	33,349
Streator	19,621	14,778	4,842
Kankakee	10,490	6,745	3,745
Danville	82,000	79,879	2,121
Total decrease .....	.....	.....	\$2,397,793

As against the above record of decrease in the fire waste, the following five cities in the State show an increase:

	1913	1914	Increase
Waukegan	\$ 18,000	\$ 21,000	\$ 3,000
Joliet	11,557	23,902	12,343
Galesburg	43,250	64,067	20,817
Evanston	24,000	68,751	44,751
Decatur	65,000	626,129	561,629
Total increase in five cities .....	.....	.....	\$ 642,540



CAPITOL BUILDING. SPRINGFIELD.

PART I.

Department of Publicity and Education

DEPARTMENT OF PUBLICITY AND EDUCATION

This Department is endeavoring by means of a campaign of education to lessen the tremendous fire waste in this State by arousing the people to a sense of their individual responsibility in this matter.

It is a serious indictment against the intelligence of the people of this State that there is destroyed in it by fire each month of the year more than a million dollars' worth of property, and furthermore, that of the 300 or more deaths by fire in this State each year probably 75 per cent of them could be easily avoided, and usually are the direct result of the grossest carelessness and neglect.

WHAT IS A FIRE LOSS?

When Prometheus brought to earth as a gift to man the fire he had stolen from the chariot of the Sun, he could never have imagined the magnitude and far-reaching effects of its benefits, nor its possibilities of destruction. It is said that human culture began with the utilization of fire, and that culture increased in the same ratio as its use. The ancients, the barbaric tribes, and even our forefathers, were interested in how to produce and preserve it, and we are generally interested in how to control and prevent it.

In this day and age the question of the preservation of any sort of property from extravagant or needless waste should receive a kindly reception from the general public. Every destruction of an asset, irrespective of what it embraces, is a distinct loss to the person or community suffering the same. The loss of property by fire is a real and absolute loss and can never be replaced. It is so much human effort, so much energy, so much material wealth wiped off the face of the earth forever.

The fact that property which has been destroyed by fire may have been insured, and the owner receive some money compensation therefor, in no way changes the condition that the property asset is forever destroyed; and the fact that he receives insurance money is simply and solely the process of taking that money out of your pocket and my pocket in premiums, and turning it over to him as our contribution

toward his misfortune. The money that he receives as insurance money is lost to us for all time. In other words, it is purely and simply a mutual contribution, made by members of a mutual organization, as a relief from temporary misfortune.

PRESS BULLETINS.

At the beginning of the year 1914 a plan was inaugurated by this Department to edit and distribute to the various newspapers of the State a press bulletin. Twenty-seven of these bulletins were issued and distributed during the year, an effort being made to issue a bulletin twice a month.

These bulletins deal with special phases of the fire problem in this State, with items of general interest concerning fire prevention, and the newspapers throughout the State have rendered valuable aid in carrying this matter of fire prevention direct to the people.

GENERAL BULLETINS.

Sixteen general bulletins were prepared during the year and distributed throughout the State to the municipal authorities, fire prevention bureaus, newspapers, and interested citizens, each of them dealing with some particular fire hazard, such as lightning, spontaneous combustion, etc. More than 100,000 of these general bulletins were prepared and distributed over the State.

CARRYING THE CAMPAIGN INTO THE SCHOOLS.

We have endeavored also to carry this campaign of education into all the schools of the State of Illinois, in order that the children may recognize that they have a large part in this fire prevention campaign.

Through the help of the Governor and the State Superintendent of Public Instruction, October Ninth, the anniversary of the great Chicago fire, has been set aside and is known as Fire Prevention Day.

This Department prepared and distributed 30,000 copies of a little booklet entitled "Fire Prevention Day in Schools." An effort was made to get a copy of this book into the hands of every school teacher in the State of Illinois. Special lessons on matches, kerosene, spontaneous combustion, bonfires, and other subjects were outlined in this little booklet in order to interest the teachers in instructing their pupils relative to the danger of fire, what to do in the event of fire, and the simpler means of fire prevention.

FIRE PREVENTION MEETINGS.

Fire prevention meetings were held in twenty-five cities of this State during the year 1914. These meetings were usually in charge of the Business Men's Associations of the cities. At each of these meetings some representative of the Fire Marshal Department discussed the matter of fire prevention and the work of the Illinois Fire Marshal Department, and I believe these general meetings have been productive of much good, especially along the line of the adoption of fire prevention and public safety ordinances.

Arrangements were also made with the Farmers' Institute of the State of Illinois to furnish speakers for a number of the Farmer's Institute meetings, and twenty-four lectures were delivered on fire prevention at Institute meetings in various parts of the State.

SPECIAL FEATURE PAGE.

Arrangements were made by this Department with the Western Newspaper Union to furnish to as many of the newspapers of the state as would care to use it a page of plate matter dealing with special features of fire waste, fire prevention and other items of general interest concerning the work of this Department. This page was furnished free of charge by this Department and was distributed to and used by 375 newspapers in the State.

PROTECTION AGAINST LIGHTNING.

A little booklet entitled "Suggestions for Protection Against Lightning" was issued by this Department early in the year 1914. The object of this pamphlet was to place before those who might be interested a clear and concise idea of the very latest conclusions arrived at by the greatest scientists, fire prevention experts and electricians of our day on this subject of lightning losses, with their opinions as to the protection afforded by lightning rods and the proper method of installing the same, with suggestions relative to avoiding danger from lightning during an electrical storm.

Twenty-five thousand of these booklets "Suggestions for Protection Against Lightning" were distributed throughout the rural sections of the State.

A few of the press bulletins and general bulletins issued during the year 1914 are here reproduced to show the general character of the work along this line.



STATE OF ILLINOIS
FIRE MARSHAL DEPARTMENT
SPRINGFIELD

W. H. BENNETT
STATE FIRE MARSHAL

PRESS BULLETIN NO. 25.
(FOR IMMEDIATE RELEASE.)

To the Editor:

We are trying to prepare this copy so that it can be used with very little, if any, editing. Credit is not desired unless you care to give it. We believe that this copy will be of general interest to your readers, and helpful along the line of the conservation of your property assets.

STATE FIRE MARSHAL.

QUEER FIRES.

Among the many peculiar fires which were reported to the State Fire Marshal Department at Springfield recently are the following:

TANK OF STOCK DIP EXPLODED BY SUN.

In Carroll county, Illinois, a disastrous fire occurred on the farm of John Shoemaker. A large tank of stock dip was left in the barn yard exposed to the intense rays of the July sun. These rays evidently caused sufficient heat to ignite the fumes of the stock dip and cause an explosion which destroyed a number of buildings. No other cause can be assigned to this fire. The dip exploded at a time when the sun's rays were hottest and when they poured directly into the tank and when no one was in the immediate vicinity of the fire.

CHURCH DESTROYED BY SPONTANEOUS COMBUSTION.

A report of a fire in Lawrence county in which a large church building, the property of the United Brethren, was destroyed would indicate that the fire was caused by spontaneous combustion. This building had just been completed at a cost of \$9,000.00 and was all ready for dedication. The day before the dedicatory services were to be held a number of women thoroughly cleaned the church, and used cloths saturated with a mixture of linseed oil, turpentine and gasoline for polishing the floors and woodwork. In order that these cloths might be retained for future use they were stored away in a small closet or cupboard and evidently became ignited from spontaneous combustion and destroyed the church.

Linseed oil is liable to cause such a fire, especially when spread over a large surface of easily ignited material, such as cotton cloth. This oil takes oxygen from the air so fast that the heat from the chemical union will, if not carried away by movement of air, rise to such a point the fibre in the rags will take fire. Then the gasoline fumes would catch fire much more easily than the fibre of the rags, and the mixture used in this case made it especially dangerous.

HEAT WAS INTENSE.

Rays of the Sun Set Fire to Window Shade and Curtain.

At a home in Peoria, Illinois, a window shade and sash curtain was discovered on fire during the hottest part of the day. It ap-

peared that the rays of the sun were concentrated in a peculiar manner by the window pane, which acted as a lens. The heat from the concentrated rays was sufficient to fire the window shade. The fire was extinguished with very little damage.

MATCH IGNITED BY THE SUN.

Sun's Rays Ignited Match in a Rockford Home.

Last week the Rockford Fire Department was called to a home to extinguish a fire caused in a peculiar manner. The rays of the sunlight falling through the window fell upon a box of matches and the heat was so intense that the matches were ignited. It frequently happens in exceedingly hot places that some defect in the window glass will act as a lens to concentrate the rays of sunlight in such a manner as to cause fire and there can be no doubt that this fire at Rockford was caused in just such a manner.

CLEANS BED WITH GASOLINE.

Lights Lamp to Help with Work and Explosion Follows.

A woman in Quincy, Illinois, used gasoline for cleaning a bed and later on carried a lighted lamp into the room. Instantly there was an explosion of the gasoline-laden air and the woman was seriously burned. The Fire Department succeeded in putting out the fire and it is reported that the woman will recover.

A NEW DANGER FROM GASOLINE.

A new danger from the explosion of gasoline whereby people are burned to death has arisen in a railroad accident at Joplin, Missouri, quite recently. It seems that there is a motor road in that country, the power of which is obtained from the use of gasoline. The train thus propelled collided with another train and the result was the explosion of their reservoirs of gasoline, which immediately set fire to both trains. The motor car contained thirty-eight passengers, every one of whom was burned to death in the fire which followed the collision. Numerous persons on the train were injured and some fatally burned.

This terrible accident forcibly illustrates the absolute necessity of safeguarding the lives of the people from this highly dangerous fluid, and leads one to the conclusion that gasoline carried on motor cars should be confined in a steel tank to prevent it from escaping in case of accident.



STATE OF ILLINOIS
FIRE MARSHAL DEPARTMENT
SPRINGFIELD

W. H. BENNETT
STATE FIRE MARSHAL

PRESS BULLETIN NO. 26.
(FOR IMMEDIATE RELEASE.)

To the Editor:

We are trying to prepare this copy so that it can be used with very little, if any, editing. Credit is not desired unless you care to give it. We believe that this copy will be of general interest to your readers, and helpful along the line of the conservation of your property assets.

STATE FIRE MARSHAL.

SERIOUS FIRES IN ILLINOIS.

During the past few months there have been a number of very serious fires in this State, causing almost the entire destruction of the business sections of those cities in which the fires occurred.

A fire at Dongola, Union county, during the month of August, caused the destruction of a number of buildings, and a total loss on buildings and contents amounting to approximately \$100,000.

A disastrous fire in Bluffs, Scott county, consumed or damaged sixteen buildings and caused a loss of nearly \$50,000.

There is scarcely a city in the State that is immune from a disastrous conflagration. If a fire once gets beyond the control of the fire department there appears to be no way of controlling it under the present methods of construction and it simply burns itself out.

MANY CITIES SUFFER FROM WATER FAMINE.

During the past six months many cities in central and southern Illinois have been placed in a serious position by the lack of an adequate water supply. This is partially due to the fact that the season has been an especially dry one, and in most sections of the State the rainfall during the summer months was remarkably light. Another reason is that the cities are constantly growing in size and an increased water supply is constantly demanded.

The real reason, however, lies in the fact that the ponds and lakes throughout the State have been drained away and there is now no supply of water to replenish the underground reservoirs.

Those inland cities in Illinois which have to depend upon a system of wells for their water supply will undoubtedly, in a few years, have to resort to some other means to supply an adequate amount of water to meet the demands of an increasing population.

FIRE PREVENTION DAY IN ILLINOIS.

In accordance with the Governor's proclamation, fixing October 9th as Fire Prevention Day, and calling for its observance by cities and schools of this State, the day was very generally observed.

The State Fire Marshal Department prepared a little book on fire waste and methods of fire prevention for use in schools of this State. Thirty thousand of these books were distributed to the teachers throughout the State, and the teachers and school officers deserve a great deal of credit for the energetic manner in which they have taken hold of this question and the hearty co-operation they have given the State Fire Marshal Department in presenting the matter of fire prevention in the schools of this State.

Great good will undoubtedly result from

the proper instruction of the coming generation on the necessity for protecting the lives and property of the people of our State from this red plague.

ARSON CONVICTIONS.

During the past two weeks seven cases of arson and burning to defraud have been tried in the circuit courts of the various counties in Illinois. Five of these cases resulted in conviction and the accused have been sentenced to the penitentiary in each case for an indeterminate sentence of from 1 to 10 years or from 1 to 20 years.

Two cases resulted in the acquittal of the parties accused.

While it is difficult to obtain convictions for arson, and the evidence available in nearly every case is of a circumstantial nature, yet it frequently happens that the facts and circumstances developed by a rigid investigation form such a strong chain of circumstantial evidence that a prima facie case is established.

SCHOOL INSPECTIONS.

The State Fire Marshal Department has had printed a supply of inspection blanks for use of school pupils in the cities of the State. These blanks are supplied to the teachers of the schools, usually by the Chief of the fire department of the city.

On these blanks are a number of questions relative to fire conditions and fire hazards and the pupil takes the blank into his home, where it is properly filled out and returned to the teacher, who later on delivers them to the Chief of the fire department.

Through these inspection reports the Chief is often brought in touch with minor defects in homes of the city, which otherwise might escape his attention, and many other defects are brought to light which are immediately removed by the owner or occupant of the building.

FARMERS OUGHT TO FIGHT FIRES.

Following a number of costly farm fires in and around the city of DeKalb, the Chronicle of that city makes a suggestion for the organization of fire fighting brigades among the farmers. It says: "Why couldn't the farmers living in a certain radius install a fire fighting apparatus at some central point which would give them something of fire protection? All of the big engine houses now manufacture motor drawn combination pumping and chemical engines, which are powerful machines, and which would be of great service in case of farm fires."

This is an advanced idea along the line of fire prevention and no doubt a motor driven truck, equipped with a 200 gallon chemical tank, located in the center of a township, would enable the farmers of that community to extinguish many fires which otherwise would soon be beyond control.



STATE OF ILLINOIS
FIRE MARSHAL DEPARTMENT
SPRINGFIELD

W. H. BENNETT
STATE FIRE MARSHAL

GENERAL BULLETIN NO. 13.

CARELESSNESS WITH MATCHES.

Every year there are many children burned to death in the United States and thousands of buildings destroyed because people use matches carelessly. In the year 1913 there were 562 fires in the State of Illinois caused by the careless use of matches, causing a loss of one-half million dollars' worth of property. In the same length of time and in the same State forty children were burned to death by having their clothes catch on fire while playing with matches. The ninety million people in the United States use as many matches as the nine hundred million in all the rest of the world. Ten thousand matches are scratched every second in America. Gasoline is the only thing in use that burns as many buildings and people as the common match.

It is wicked carelessness to leave matches lying about, because they are so easily lighted. The sun's rays coming through a bubble in the window glass, a fish globe, a water bottle, a round paper weight, or grandma's spectacles will light the match they shine upon. If matches are loose in drawers or on desks, they may take fire from something hitting or rubbing them. The heat from a stove or grate may light them if they are left on the mantel. They may be brushed off a shelf or mantel and be stepped upon and lighted.

THE HEAD OF THE MATCH.

The head of the match is made of phosphorus, chlorate of potash, rosin, whiting and powdered flint, held together by glue. The rubbing of the flint makes enough heat to fire the phosphorus; the chlorate lets go of the oxygen in it with an explosion and great heat. This heat fires the rosin and then the paraffin in which the match stick was soaked takes fire and the stick itself begins to burn. If either saltpeter or sulphur is used in place of chlorate of potash a silent and slow match is made which does not snap and fly. When the chlorate or "parlor match" is stepped upon it sounds its own fire alarm—this is the only good thing about it.

THE SAFETY MATCH.

In Europe matches are found only in their proper places, and the sale and use of the dangerous kinds are usually forbidden by law. In most European countries only safety matches can be used. These matches are made in the same way as that of the parlor match, except that the phosphorus is omitted from the head of the match and is placed in combination with other elements on the side of the box. These matches can only be scratched on the box and are reasonably safe, and the only kind that should be used by a careful, painstaking housewife.



STATE OF ILLINOIS
FIRE MARSHAL DEPARTMENT
SPRINGFIELD

W. H. BENNETT
STATE FIRE MARSHAL

GENERAL BULLETIN NO. 15.

SPONTANEOUS COMBUSTION.

Spontaneous combustion is responsible for many fires in the State of Illinois, according to reports received by this Department, and it is undoubtedly true that a large per cent of the 2,000 fires reported as being of unknown origin are in reality due to the same cause.

For every substance there is a particular temperature at which it catches fire spontaneously. This temperature, of course, varies widely with the different substances. In some cases the heat generated by the slow combustion of a substance may raise its temperature sufficiently high to cause ignition, which is then called spontaneous combustion. Thus, greasy rags, sawdust with linseed oil, or wet hay piled in heaps might ignite spontaneously. Greasy rags cause many fires from spontaneous combustion. Vegetable oils, especially linseed oil, are liable to cause such fires. They take oxygen from the air so rapidly that the heat from the chemical union will, if not carried away by a movement of air, rise to a point at which the fibers of the rag will first char and then take fire. It is especially dangerous to put greasy rags in closets or cupboards, because they frequently cause spontaneous combustion fires.

In all combustions we have at least two substances acting chemically upon one another, which substances are generally spoken of as combustible bodies and supporters of combustion. Illuminating gas is a combustible substance and oxygen is a supporter of combustion, but these terms are only relatively correct.

Combustion may be slow or rapid, accompanied by flame or not. The appearance of flame indicates the presence of a gas or vapor which has been raised to a temperature at which it becomes luminous. The total amount of heat evolved during the rapid combustion of a substance is the same as that generated by the same substance undergoing slow combustion, but the intensity of the heat depends upon the time required for oxidation.

A piece of wood in a forest may require years to combine with oxygen, or it may burn up in a few minutes in a stove, and yet the total amount of heat generated in each case is the same, though we can measure it in the first instance only by the most delicate instruments, while in the second it is very intense.

The reaction of oxygen in the sulphur and iron found in soft coal frequently causes sufficient heat to cause serious fires. If this heat cannot be radiated away and the oxidation and increase of temperature goes on until a kindling temperature is reached, then the gases from the coal are ignited. Moisture plays an important part in such fires. Barns are frequently destroyed by the heating of new-mown hay. Dry hay does not ignite spontaneously, but hay that is not sufficiently cured frequently heats to such an extent that it takes fire and thereby much valuable property is destroyed.

PART II.

Department of Inspection

DEPARTMENT OF INSPECTION

During the year 1914 the same system of general inspection was followed which had been inaugurated at the beginning of the Department, except that the work was carried into the smaller cities and towns which heretofore had been necessarily neglected to a certain extent, owing to the fact that this inspection work was first taken up and carried on in the larger cities of the State.

Most of the large cities have now adopted a plan of having a systematic inspection of the business districts made at frequent intervals by the members of the fire departments. More and more the cities are relying on their fire departments to remove or bring about the removal of causes from which fires originate or by which they spread. This is natural, logical, even imperative, in an age whose watchword is conservation and whose trend is to practical economics rather than to theory, and which would economize in vitality and energy as well as in resources and in men.

The selection of the fireman for this important work is logical, because of all men he is most familiar with fire as a hazard. Day after day and night after night he grapples with it face to face, oftentimes at cost of his life. Knowing its power, there is no one so well fitted to put in operation the methods by which its ravages may be prevented. The selection of the fireman to do fire prevention work is natural because, in addition to his daily familiarity with the hazard, there is no one who, apart from the time required in the actual performance of the duties for which he is principally employed, viz.: the reduction of the fire waste, has so much time which can be profitably employed with this purpose in view. Moreover, if he employs the bulk of the time in which he is not engaged in fire fighting in the work of fire prevention the chances are largely in his favor that he will reduce by many hours the time he is required to fight fire, thereby lessening the arduousness of his employment and the danger to life and limb involved. In addition, the selection of the fireman for this work is imperative because, first, the work must be done in order to lift the intolerable

burden of the fire tax from the people, and, second, it is easier to train the fireman, the material we have, for this work, than to find a man who is competent to accomplish the scientific task involved and then to train him for the physical and moral requirements of fire extinguishment.

The prime necessity, therefore, is to see that the fireman, already qualified to the highest degree in his special line, has every incentive to become equally efficient in the broader, more scientific and more important work of fire prevention.

For the year 1915 a somewhat different system of inspection work will be followed. The State has been divided into twelve inspection districts, and a Deputy has been assigned to each of these as the Inspector for that district. This Inspector will have general supervision of all inspection work in the district to which he has been assigned, will be held responsible for conditions in it, and all inspection orders issued therein will be signed by him as Special Inspector for the district.

Following is a short summary of the inspections made by the Department during the year 1914:

Number of inspections made—12,500.

Number of verbal orders issued—4,500.

Number of written orders issued—3,350.

Number of written orders for repair of flues, etc.—1,125.

Number of written orders for removal of rubbish—1,450.

Number of written orders for removal of gasoline—112.

Number of written orders for repair of buildings—255.

Number of written orders for proper storage of explosives—126.

Number of written orders for proper construction of moving picture booths—162.

Number of written orders for proper installation of fire escapes—120.

INSPECTIONS BY FIRE DEPARTMENTS

Many cities in Illinois have adopted ordinances providing for the inspection of premises therein by members of the Fire Department in order to safeguard the lives and property of their people from the calamity of fire.

In such cities the fire departments are carrying on a regularly organized system of inspection at frequent intervals, and I believe this system has had much to do with the material decrease in the fire waste in the larger cities and towns of Illinois. However, some cities have preferred to carry on this inspection work under the authority given the Chiefs of the Fire Departments by Section 9 of the State Fire Marshal Act, which gives to such officer all the authority to enter buildings, inspect conditions and order same removed or remedied when found hazardous, that is given to the State Fire Marshal or any of his Deputies.

To facilitate the work of these Chiefs in carrying on this great campaign of fire prevention in the cities of the State where this work is done under the authority given them by the State Fire Marshal law, the inspection order blank on the opposite page has been printed and distributed for their use.

As an illustration of the work that is being done by these various Fire Departments, I quote from the annual report of the Chief of the Fire Department of Bloomington, as made by Chief Henry Mayer:

"There are in the city of Bloomington 5,999 frame buildings and 901 of brick and stone construction, or a total of 6,900 in the city. These buildings are inspected by the members of my Department four times each year and detailed reports of these inspections are made to the State Fire Marshal's office at Springfield, Illinois. Whenever any difficulty is experienced in getting conditions removed or remedied, the cooperation of the State Fire Marshal's office is obtained in order to force such compliance. During the year my Department ordered the rebuilding or repair of 1,071 chimneys and flues. Seven houses were condemned and torn down. Seventy-three houses were repaired and put in good condition. Seventeen barns and twenty-one sheds were condemned and torn down. Every moving picture show house and theater building in the city is inspected once each week. Bulletins and other literature received from the State Fire Marshal Department are posted in conspicuous places and distributed throughout the city, and during the past year a number of fire prevention bulletins dealing with special phases of fire hazards were issued by me as Chief of the Fire Department of Bloomington, published in the local papers and distributed throughout the business section of the city."

Chief Mayer is one of the many Chiefs of the State of Illinois who is paying special attention to the fire prevention campaign, and he states in his annual report that in his opinion we will soon reach that stage where a man will be fined and imprisoned for failure to use proper measures for the prevention of fire.

ORDER

ISSUED BY AUTHORITY OF THE STATE FIRE MARSHAL LAW For the Removal of a Fire Hazard Condition

To.....Illinois,191.....

An inspection of the following described property, namely:.....
.....located at No.
.....Street.....Illinois, was
made by the undersigned Chief of the Fire Department of said city on
this day and I find by such inspection a fire hazard condition prohibited
by Section 9 of Chapter 127aa (Hurd's) of the Statutes of Illinois, as
hereinafter set forth.

Therefore, pursuant to the authority vested in me by virtue of my
office as Chief of the Fire Department of said city in said state, under
Section 9 of "An Act creating the office of the State Fire Marshal, de-
scribing his duties and providing for his compensation and for the
maintenance of his office," as approved June 15, 1909, of the Statutes
of the State of Illinois, you are hereby ordered to remove or remedy
the conditions as required by the terms of this order, and due compliance
with said order shall be made by you on or before the day of
.....A. D. 19....., as follows:

- *1. Remove the fire hazard condition existing by reason of an old and
dilapidated building on said premises,.....
- *2. Repair the building on said premises
- *3. Repair or rebuild the flues on the building on said premises.....
- *4. Rewire or repair the electric wiring on said premises.
- *5. Remove all accumulation of rubbish, excelsior, empty boxes and
barrels, waste paper and other combustible waste material from
said premises.
- *6. Remove from building and properly store dynamite or other ex-
plosives now on said premises.
- *7. Remove and properly store gasoline, benzine or other volatile oils
on said premises.
- *8. Reconstruct or repair the moving picture booth located on said
premises so that it shall conform with the requirements con-
tained in Bulletin No. 8, attached hereto.

.....
and you are advised to in no wise omit complying therewith under
penalty of the State Law. And should you feel aggrieved by the fore-
going order you are advised of your right to appeal within ten days
to the State Fire Marshal of Illinois, at the City of Springfield, Illinois.

Witness my signature at the city of.....county of
....., State of Illinois, this...day of.....A. D. 19....

STATE OF ILLINOIS
FIRE MARSHAL DEPARTMENT,
SPRINGFIELD.

Chief of the Fire Department.

The foregoing order is issued in conformity
with the State Fire Marshal Law of Illinois
and a due observance thereof is required.

WALTER H. BENNETT
State Fire Marshal.

*Strike out each one of the conditions not found in this particular building.

SCHOOL INSPECTIONS

Pupils Record Conditions in Homes on Blanks Furnished by State Fire Marshal Department

The State Fire Marshal Department has had printed a supply of inspection blanks for use of school pupils in the cities of the State. These blanks are supplied to the teachers of the schools, usually by the Chief of the fire department of the city.

On these blanks are a number of questions relative to fire conditions and fire hazards. These blanks are delivered to the pupils, who take them into their homes, where they are properly filled out and returned to the teacher, who later on delivers them to the Chief of the Fire Department.

Through these inspection reports the Chief is often brought in touch with minor defects in homes of the city, which otherwise might escape his attention, and many of these defects are immediately removed by the owner or occupant of the building without further attention.



STATE OF ILLINOIS
FIRE MARSHAL DEPARTMENT
SPRINGFIELD

W. H. BENNETT
STATE FIRE MARSHAL

County of.....City of.....
Location of building..No.....Street.....
Is building of brick, stone or wood?.....
How many stories in building?.....
How is the building lighted?.....
How is the building heated?.....
Of what material is the basement?.....
Is the basement or foundation enclosed?.....
How many flues or chimneys in building?.....
Are chimneys in good repair?.....
Are chimneys built from the ground or on brackets?.....
Do stove pipes pass through the attic?.....
Do stove pipes pass through closets or unused rooms?.....
Do stove pipes pass through floors or partitions without metal protectors?

Is gasoline kept on the premises?.....
In what quantities?.....
Where and how is gasoline kept?.....
Do you use oil mops, or oiled cloths for floors?.....
Where are same kept when not in use?.....
Is there any accumulation of rubbish in the basement?.....
What is the telephone number of your fire department?.....
Where is the location of the fire alarm box nearest your home?

.....
Name any conditions which you regard as unsafe in and about your home.....●●
.....
.....
.....
.....

(Signature.

INSPECTION DIVISION.

For use in Public Schools.

FIRE PREVENTION CAMPAIGN

Illinois State Fire Prevention Association and Deputy Fire Marshals Inspect Twenty-three Cities During Year 1914

The plan of holding general inspections and fire prevention meetings twice each month in the different cities of the State was continued during the year 1914. At these general inspections from twenty to forty members of the Illinois State Fire Prevention Association and from five to fifteen Deputy State Fire Marshals, depending upon the size of the town, have met twice each month in some city of the State and made a thorough, systematic general inspection of the business district. These inspections were usually under the direct charge of the Business Men's Association of the city. Fire prevention addresses were delivered to the school pupils of the various schools and a general public meeting at which the fire prevention problem was discussed was usually held in connection with this work.

The following is a brief report of the cities visited, buildings inspected and defects found:

		Buildings Inspected	Defects Found	Defects Corrected
Jan. 14	Salem	142	100	96
Jan. 21	Canton	214	61	60
Jan. 28	Dixon	247	85	85
Feb. 18	Centralia	211	30	24
Feb. 25	Monmouth	210	86	74
Mar. 11	Paris	307	100	97
Mar. 24	Geneva	82	25	19
Mar. 24	St. Charles	77	25	16
Apr. 8	Casey	125	25	17
Apr. 15	Beardstown	265	60	40
Apr. 28	Aurora	415	80	70
May 6	Granite City	200	40	37
May 6	Madison	83	15	12
May 13	Champaign	228	69	54
May 13	Urbana	70	40	33
May 20	Mt. Sterling	128	74	69
May 27	Lewistown	121	41	33
June 10	Metropolis	191	83	63
Sept. 29	Jacksonville	197	50	28
Oct. 21	Danville	468	94	40
Nov. 11	Freeport	200	90	84
Nov. 18	Rockford	646	170	70
Dec. 15	Decatur	450	122	105
		5277	1565	1226



DEPUTY SPECIAL INSPECTORS AND DEPUTY STATE FIRE MARSHALS AT DECATUR, ILLINOIS, DECEMBER 15, 1914.
TAKEN JUST BEFORE BEGINNING THE GENERAL INSPECTION OF THAT CITY.

BUREAU OF FIRE PREVENTION AND PUBLIC
SAFETY, CHICAGO



J. C. McDONNELL, CHIEF
Bureau of Fire Prevention and Public Safety.

BUREAU OF FIRE PREVENTION AND PUBLIC SAFETY

CHICAGO, January 26, 1915.

Mr. Walter H. Bennett, State Fire Marshal, Springfield, Ill.

DEAR SIR:—At your request, I herewith submit a brief summary of the work performed by the Bureau of Fire Prevention and Public Safety for the year 1914:

Total number of inspections (buildings of all classes, including theaters)	121,036
Permits granted and applications for licenses approved after due inspections:	
Gasoline tanks	858
Projecting electric signs and canopies.....	170
Dry cleaners	98
Garages	116
Film exchanges	37
Explosives (handling, use, etc.	188
Acetylene (compression, storage and sale	95
Amusement places (theaters, halls, etc.)	242
Special theater employes (stage firemen and fire guards being first duly examined	
Special men to handle high explosives (being first duly examined as to their fitness)	117
Sprinkler and standpipe equipments supervised and finally approved	22
Fire alarm systems approved	167
Law suits on violations started.....	712
Cases non-suited upon correction of violations.....	513
Fines outstanding	41
Fines vacated	12
Suits pending	80
Complaints from boiler department attended to	219

In addition to the foregoing, this Bureau examines all building plans (with the exception of residences) and an innumerable amount of plans for the erection and setting of heating and other devices. It supervises fire drills in theaters, schools, hospitals, department stores, manufacturing and mercantile buildings, and is being consulted to quite

an extent by the public, some local departments and other municipalities on questions in fire prevention and public safety.

Theaters and moving picture shows are inspected nightly by the Bureau. This care and diligence doubtless has resulted in the prevention of any serious fire or panic in this class of buildings.

The work of the Bureau, in addition to its being of an executive character, has been to a large extent educational to the citizens of Chicago, its advice being sought in fire prevention and fire protection matters by various classes of citizens and organizations in the city as well as throughout the country. Many communications have been received from municipalities and the state organizations asking for advice as to the organization and operation of the Bureau, the nature of its ordinances and the result of its work, with a view to working out some similar plan for conserving life and property within their jurisdiction.

Unquestionably the organization of the Fire Prevention Bureau will have an increasingly beneficial result upon the efficiency of the Fire Department itself, as the men graduating from the Bureau are appointed lieutenants, and by reason of the knowledge they have gained undoubtedly will make more efficient officers.

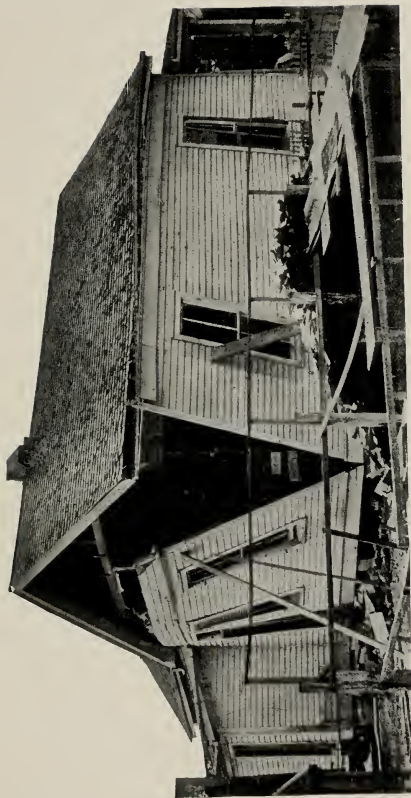
Pursuant to the ordinances governing the Bureau, we have been able to organize and supervise fire drills in various classes of buildings, with special emphasis on mercantile buildings where considerable numbers of people are employed.

At the request of the Wholesale Clothiers' Association, which looks after the safety and welfare of the employes of approximately 150 shops employing garment workers, fire drills and safety measures were instituted by the Bureau of Fire Prevention and Public Safety. Mr. M. I. Berger, Director of the Service Department of this Association, states that they had but one fire in their shops since the institution of fire drills and fire prevention methods. This fire occurred in the shop of Kuh, Nathan & Fischer, Ashland Avenue and 22nd Street, employing approximately 125 persons. The fire was extinguished without apparent loss by the fire brigade of said firm. Mr. Berger attributes the extinguishment of this fire directly to the institution of fire drills and the lack of fires in these shops to the co-operation which this Bureau has given to the Association in fire prevention methods.

Respectfully yours,

(Signed) J. C. McDONNELL,

Chief, Bureau of Fire Prevention and Public Safety.

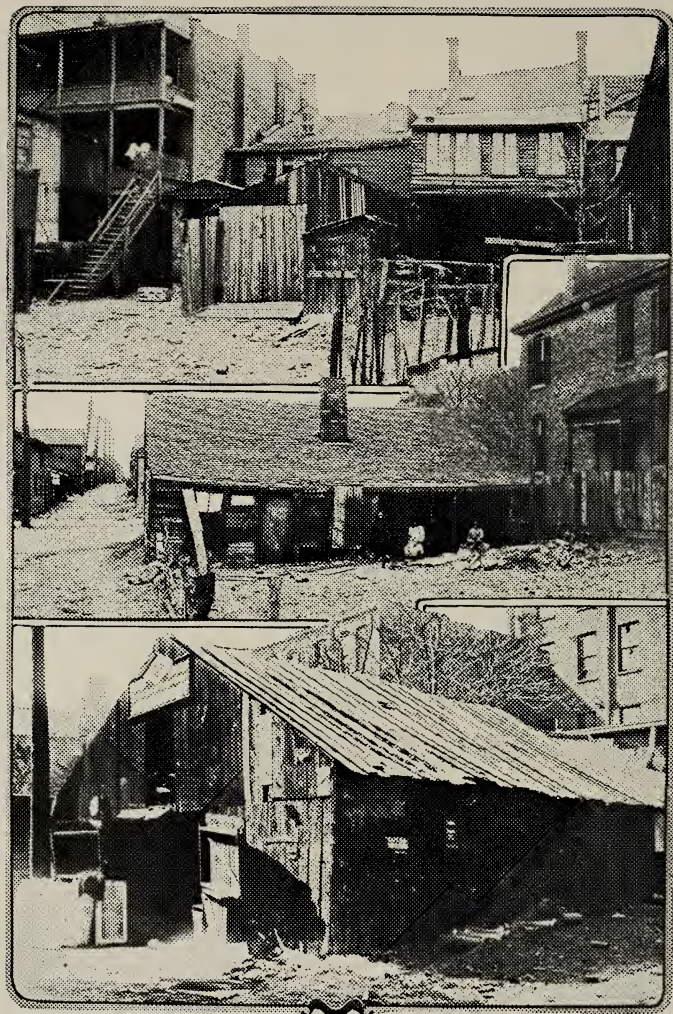


WHAT A PINT BOTTLE OF GASOLINE DID

One person was killed and three others injured by a gasoline explosion which completely wrecked the home of Dr. Edward J. Cherault of Morgan City, Ind. A pint bottle of gasoline which some member of Dr. Cherault's family had left uncorked caused the explosion. When a match was struck, the gasoline vapor exploded with tremendous force as the above picture vividly indicates.

The picture on the opposite page shows a wreck which occurred in Illinois last year and a fire which might have been avoided had a chemical extinguisher been available at the proper time.





CHARACTER OF OLD FIRE TRAPS CONDEMNED BY THE FIRE MARSHAL DEPARTMENT OF ILLINOIS AND ORDERED TO BE REMOVED AS A FIRE HAZARD TO THE SURROUNDING COMMUNITY.

PART III.

Department of Investigation



F. R. MORGARIDGE
Assistant State Fire Marshal

DEPARTMENT OF INVESTIGATION

Investigations, Arrests and Prosecutions

The following summary is a concise statement of the work of the Fire Marshal Department of the State of Illinois for the year 1914, in the investigation of those fires reported to it as being of incendiary origin.

In those cases in which the investigation developed that the fire was really of incendiary origin, and the facts and circumstances showed strongly the guilt of any particular persons, the evidence accumulated was laid before the State's Attorney in the county in which the fire occurred, and, when he deemed such a course advisable, criminal action followed.

I might add that in many of these investigations the evidence developed by the Department shows that the fire is not of incendiary origin, but is in reality an accidental fire, and, on the other hand, there can be no question but that many fires reported as being of unknown or of accidental origin are in reality due to incendiarism. I firmly believe that the number of incendiary fires in this State is much greater than is generally estimated.

Practically all of the incendiary fires now reported to the Department are isolated cases in which seldom more than two or three persons are involved, and the organized bands of incendiaries, that is, those persons who have followed the practice of having fires first in one section of the State and then in another for the purpose of defrauding the insurance companies, have been practically driven from the State.

The number of fires reported to this Department as of incendiary origin—417.

The number of fires investigated—350.

The number of arrests—132.

The number of indictments—72.

The number of cases tried—67.

The number of persons convicted—42.

The number of persons acquitted—21.

The number of mistrials—4.

The number of cases pending—32.

The number of cases pending from 1913—15.

MOTIVES: Motives which prompted incendiary fires for which convictions were obtained in the year 1914 were as follows: Burning to defraud an insurance company—16; arson for revenge—10; pyromania—9; malicious mischief—5; to hide another crime—2.

A Record of Prosecutions for Arson and Burning to Defraud in the State of Illinois for the Year 1914.

This record contains only those cases which have been brought to trial and finally disposed of and for which convictions were obtained.

Jerry Findley, Kewanee, Henry county, arrested January 9, 1914, charged with arson. Taken before county judge of Henry county; commission appointed to inquire into his sanity. Was adjudged insane and committed to asylum at Watertown.

Ed. Kreisel, West Hammond, Cook county, arrested January 26, 1914, charged with arson. Taken into juvenile court and paroled to the Working Boys Home, 1140 West Jackson street, Chicago.

Charles Blevins, Fairbury, Livingston county, arrested December 24, 1913, charged with arson and burning to defraud. Indicted for arson January 13, 1914. Tried February 16, 1914, entered plea of guilty and was sentenced to penitentiary at Joliet for an indeterminate sentence of from one to twenty years.

Thomas Hornsby, Fairbury, Livingston county, arrested December 24, 1913, charged with arson and burning to defraud. Indicted for arson January 13, 1914. Tried February 16, 1914, entered plea of guilty and was sentenced to penitentiary at Joliet for an indeterminate sentence of from one to twenty years.

Louis J. Sleph, Chicago, Cook county, arrested March 19, 1913, charged with arson and burning to defraud. Tried on charge of burning to defraud, and on March 3, 1914, jury returned verdict of guilty. Was sentenced to Joliet penitentiary for an indeterminate sentence of from one to ten years. Motion for a new trial granted by Judge Burke.

Martha Washington (colored), Chicago, Cook county, arrested February 25, 1914, charged with arson. Taken before Judge Owens and adjudged a pyromaniac. Committed to asylum at Kankakee.

John Baxter Hover, Galesburg, Knox county, arrested March 17, 1914, charged with arson. Taken before County Judge R. Cliffe Rice and adjudged a pyromaniac. Committed to asylum at Watertown.

Alex. Novac, Dorrisville, Saline county, indicted December 16, 1912, for burning to defraud. Tried in circuit court April 21-25, 1914. Jury returned verdict of guilty. Sentenced to penitentiary for an indeterminate sentence of from one to ten years. Case appealed to Supreme Court on writ of error, and at the December term, 1914, was reversed and remanded for retrial.

Pete Rudolph, Havana, Mason county, arrested August 29, 1913, charged with arson. Tried April 27, 1914, to May 6, 1914, before Judge Williams. Jury returned verdict of guilty. Sentenced to indeterminate term of from one to twenty years. Motion for new trial granted.

Retried at the November term of the circuit court of Mason county and after the evidence of the prosecution had been presented, plea of not guilty was changed to that of guilty. Rudolph was sentenced to the penitentiary at Chester for an indeterminate sentence of from one to twenty years.

Harry Thomas, Havana, Mason county, arrested August 29, 1913, charged with arson. Tried April 27, 1914, to May 6, 1914, before Judge Williams. Jury returned verdict of guilty. Sentenced to an indeterminate sentence of from one to twenty years. Motion for new trial granted, and at the November term of the circuit court case was dismissed by agreement.

John Martin, Havana, Mason county, arrested August 29, 1913, charged with arson. Appeared before Judge Williams of the circuit court of Mason county, January term, 1914, and entered a plea of guilty. Sentenced to penitentiary at Chester for an indeterminate term of from one to twenty years.

Charles DeFrates, Havana, Mason county, arrested August 29, 1913, charged with arson. Went before Judge Williams at the November term of the circuit court, 1914, and entered a plea of guilty. Given an indeterminate sentence of from one to twenty years.

Joseph Petrovich, Rockdale, Will county, arrested April, 1914, charged with attempt to commit arson. Charge changed to disorderly conduct. Fined \$25.00 and costs May 2, 1914.

Byron Chumley, Coffeen, Montgomery county, arrested January 23, 1913, charged with burglary, larceny and arson to cover up theft. Plead guilty to burglary and larceny; claimed fire started accidentally. Sentenced April 22, 1914, to Illinois Reformatory at Pontiac for indefinite term.

Morris Nudelman, Chicago, Cook county, arrested April 5, 1913, charged with arson. Indicted by grand jury for arson and bond reduced to \$10,000. Tried in circuit court of Cook county before Judge McDonald May 15-20, 1914. Jury returned verdict of guilty. Sentenced to penitentiary at Joliet for indeterminate sentence of from one to twenty years.

Jesse Canfield, Villa Grove, Douglas county, arrested April, 1913, charged with arson and burning to defraud. Turned state's evidence and testified in trial of McMillan case. In jail about a year, when state's attorney nollied case in May, 1914.

George Bixler, Villa Grove, Douglas county, arrested April, 1913, charged with arson and burning to defraud. Turned state's evidence and testified in trial of McMillan case. In jail about a year when state's attorney nollied case in May, 1914.

Solomon Kohn, Chicago, Cook county, arrested April 5, 1913, charged with burning to defraud. Indicted June, 1913. Tried May, 1914, before Judge Walker. Found guilty May 29, 1914. Motion for new trial overruled. Defendant sentenced to penitentiary at Joliet for an indeterminate sentence of from one to ten years.

Alma R. Knott, Elgin, Kane county, arrested April 25, 1914, charged with arson. Indicted May, 1914. Tried June 2, 1914, before Judge Irwin. Adjudged insane and sentenced to asylum for criminal insane at Chester.

Henry Carlton, Bloomington, McLean county, arrested March 13, 1914, charged with arson. Indicted April term, 1914, for arson. June 5, charge reduced to malicious destruction of property to the value of fifteen dollars. Plead guilty and sentenced to county jail for thirty days.

Adam Wascovitz, Bloomington, McLean county, arrested March 13, 1914, charged with arson. Indicted April term, 1914, for arson. June 5, charge reduced to malicious destruction of property to the value of fifteen dollars. Plead guilty and sentenced to county jail for thirty days.

Herman Helbing, Grant Fork, Madison county, arrested on charge of arson and indicted March 18, 1914. Entered plea of guilty before Judge W. E. Hadley in circuit court of Madison county June 9, 1914. Sentenced to the penitentiary at Chester for an indeterminate term of from one to twenty years.

Leopold Benjamin Melnick, Chicago, Cook county, arrested April 5, 1913, charged with arson and burning to defraud. February 23, 1914, surrendered on bond and sent to jail. Tried June 22-23, 1914, before Judge Sullivan. Jury returned verdict of guilty. Sentenced to penitentiary for an indeterminate sentence of from one to twenty years.

Felix A. Melnick, Chicago, Cook county, arrested April 5, 1913, charged with arson and burning to defraud. February 23, 1914, surrendered on bond and sent to jail. Tried June 22-23, 1914, before Judge Sullivan. Jury returned verdict of guilty. Sentenced to penitentiary for an indeterminate sentence of from one to twenty years.

Mrs. Adeline Lee, Middletown, Logan county, arrested July 14, 1914, charged with arson. Taken before county judge of Logan county and adjudged insane. Placed in custody of her son. If her condition should later warrant such action she will be removed to an institution for the insane.

John Kingston, McLeansboro, Hamilton county, arrested July 15, 1914, charged with arson. July 22, 1914, he was taken before the county judge of Hamilton county and found to be of unsound mind. Committed to asylum at Anna, Illinois.

Freeman Wiles, Danville, Vermilion county, arrested and confessed to Deputy Sloan to having set fire to a number of barns and a garage. Placed in custody of his mother.

Thomas Wiles, Danville, Vermilion county, arrested and confessed to Deputy Sloan to having set fire to a number of barns and a garage. Placed in custody of his mother.

John Hedspath, Alton, Madison county, arrested June 29, 1914, charged with arson. Indicted September 18, 1914. Arraigned before circuit

judge of Madison county on October 1, 1914, and entered a plea of guilty. Sentenced to the penitentiary at Chester for an indeterminate sentence of from one to twenty years.

Elmer Walters, Joliet, Will county, arrested June 24, 1914, charged with arson. Confessed to chief of police. Indicted October, 1914. Taken before circuit judge and entered a plea of guilty. Sentenced for indeterminate sentence of from one to twenty years.

William Vogelsong, Peoria, Peoria county, arrested April 25, 1914, charged with arson. Confessed to Chief of Police Rhodes that he started fire which destroyed cattle and cattle barns belonging to the Edward Morris Company. Indicted May 20, 1914. Tried before Judge Worthington September 28 to October 1, 1914. Jury returned verdict of guilty. Motion for new trial overruled. Sentenced to penitentiary for an indeterminate term of from one to twenty years.

Walter Swartz, Lincoln Township, Ogle county, arrested September 29, 1914, charged with burning to defraud. Confessed to Deputy Holland. Taken before Circuit Judge Farrand at Oregon, and entered plea of guilty. Sentenced to penitentiary for indeterminate sentence of from one to ten years.

Abe Ratner, Chicago, Cook county, sentenced November 18, 1914, for arson, one to twenty years in the penitentiary at Joliet. Ratner was a fugitive from justice, having been convicted in 1912 by Assistant State's Attorney Frank Johnson. Ratner fled to Moose Jaw, Canada, while a motion for a new trial was pending. He was brought back by Michael A. Flanagan, Special Investigator for State's attorney Maclay Hoyne.

Joseph Bridges, Waverly, Morgan county, arrested July 22, 1914, charged with attempt to commit arson and attempt to commit murder. Indicted and tried in the circuit court of Morgan county November 24, 1914, for attempt to commit murder. Jury returned verdict of guilty. Sentenced for an indeterminate term of from one to twenty years.

Robert Hunter, Elkhart, Logan county, arrested November 29, 1914, charged with arson. Taken before county judge and examined as to his sanity. Adjudged insane and committed to asylum at Jacksonville.

Morris L. Fox, Chicago, Cook county, indicted April 8, 1913. Tried in criminal court of Cook county before Judge O'Connor on charge of burning to defraud, August 1 to 17, 1914. Jury returned verdict of guilty. Motion for new trial pending.

Chester Rodhamel, Danville, Vermilion county, arrested December 3, 1914, charged with arson and later released. Rearrested on complaint of Deputy Sloan on December 8. Special grand jury called and three indictments for arson were returned. Rodhamel entered a plea of guilty before Circuit Judge Thompson and was sentenced to the penitentiary at Chester for an indeterminate sentence of from one to twenty years.

Louis Rees, Chicago, Cook county, indicted for burning to defraud April 5, 1913. Tried in criminal court of Cook county before Judge Windes June, 1914. June 18, 1914, jury returned verdict of guilty. Sentenced to indeterminate term of from one to ten years in penitentiary at Joliet.

Samuel Adelman, Chicago, Cook county, indicted for burning to defraud April 5, 1913. Tried in criminal court of Cook county before Judge Windes, June, 1914. June 18, 1914, jury returned verdict of guilty. Sentenced to indeterminate term of from one to ten years in penitentiary at Joliet.

Harry Kerr, Chicago, Cook county, arrested July 5, 1914, for setting fire to two barns. Arraigned in juvenile court of Cook county, charged with arson. Kerr was paroled.

Fred Bullard, Chicago, Cook county, arrested July 5, 1914, for setting fire to two barns. Arraigned in juvenile court of Cook county, charged with arson. Defendant was paroled.

J. Scott Stone, Tolono, Champaign county.—On September 28, 1914, at 1:45 a. m., a frame dwelling occupied by J. Scott Stone, his wife and four children, was discovered to be on fire, and Stone was the only one to escape from the burning building. Deputies from the Fire Marshal Department made an investigation into the matter of this fire and accumulated evidence which satisfied themselves that Stone was guilty of murdering his entire family and burning the house to cover up evidence of the crime. On October 30, 1914, Stone was arrested at Jefferson Barracks, St. Louis, Missouri, where he had enlisted in the United States army. He was taken to Champaign county, where he was held charged with murder and arson. On January 11, 1915, the grand jury of Champaign county returned indictments against him for both charges and he was taken before Judge Boggs of the circuit court, where he entered a plea of guilty to the charge of murder. He had previously made a complete confession to the deputies from this Department, in which he stated he had shot his wife and four children and set fire to the house to hide evidence of the crime. He was sentenced to the penitentiary at Chester by Judge Boggs for the term of his natural life.

FIREBUGS DRIVEN OUT OF ILLINOIS

States Not Having a Department Similar to the Illinois Fire Marshal Department Show an Alarming Increase in the Number of Fires and the Total Fire Losses

That many of the organized bands of incendiaries which formerly operated in the State of Illinois are now conducting their nefarious business in other localities is conclusively proven by the alarming increase in fires and fire losses in those states not having a Fire Marshal Department.

The Chief of the Fire Department of St. Louis, Missouri, in commenting upon the tremendous increase in fire waste in that city, states that incendiarism was the chief cause of this great increase, and this fact, he says, renders imperative the establishment of the office of Fire Marshal in the state of Missouri.

The records of the St. Louis Department show that there were 4,674 fires in that city during the year 1914, causing a total damage of \$2,927,214, as compared to \$1,176,111 in 1913, an increase of \$1,751,100, or, approximately 150 per cent.

We have reason to believe that organized bands of firebugs, some of whom formerly operated in Chicago and other cities in Illinois, are now operating in the city of St. Louis, as well as in other large cities in the west, and the police department of St. Louis recently secured a confession from a former resident of Illinois who is now in St. Louis which lays bare the operations of one branch of this arson trust.

The fire losses in most of the larger cities of Illinois show a considerable decrease in 1914 as compared with the year previous. Thus, for example, the fire loss in the city of Chicago is a million dollars less in 1914 than in 1913. The total fire loss in the city of Chicago for the year 1914 was \$4,500,000, or a per capita loss of \$1.83; and estimating the population of the city of St. Louis at 700,000, shows the per capita loss in that city to be \$4.18.

The campaign against the firebug inaugurated in the State of Illinois by this Department, and so ably supported by the state's attorneys of the various counties, is beginning to show results. Especially is this true in the city of Chicago where the vigorous prosecution of those persons charged with arson and burning to defraud by State's Attorney Maclay Heyne has practically stopped the extended operations of those bands of incendiaries who carried on a campaign of burning for the purpose of defrauding the insurance companies.

The fire loss in the city of Chicago for the last six months of 1914 amounted to \$2,149,063, the smallest loss in that city for the same period of time in the last twenty years.



JOSEPH J. MURRAY, ATTORNEY
Chicago Fire Department

CHICAGO FIRE ATTORNEY ACTIVE IN THE INVESTIGATION OF INCENDIARY FIRES

One of the agencies which has had much to do with the decrease of incendiary fires in the city of Chicago is that department of investigation in charge of the city fire attorney, Joseph J. Murray.

Four special investigators are connected with this department, devoting their entire time to the investigation of suspicious and incendiary fires. Sergeants John W. Loftus, James Doody, Thomas Keating and William O'Brien are officers trained in the investigation of suspicious fires, and have rendered to the Fire Marshal Department their assistance and co-operation in the work of checking the operations of incendiaries in the city of Chicago.

These men have rendered the city of Chicago valuable service in collecting and accumulating evidence against firebugs and in co-operating with State's Attorney Maclay Hoyne in making the business of arson an unprofitable one to follow in that city.



A VIEW OF "OAKHURST," BEVERLY HILLS, ILLINOIS, SCENE OF MYSTERIOUS FIRE.



INTERIOR OF "OAKHURST" SHOWING BROKEN WINDOW PANE AND FUSE
LEADING TO SATURATED COTTON BATTING ON FLOOR; ALSO CAN THAT
CONTAINED GASOLINE.



INTERIOR OF "OAKHURST" SHOWING LINE OF SATURATED COTTON ALONG FLOOR LEADING THROUGH THE VARIOUS ROOMS.



INTERIOR OF "OAKHURST," SHOWING METHOD OF LEADING TRAIN OF SATURATED COTTON AND GUNPOWDER FROM LOWER FLOOR TO UPPER FLOOR BY MEANS OF STAIRS.



EVIDENCES OF AN INCENDIARY FIRE. OIL FOUND IN TUBS AND OTHER VESSELS. SPOTS ON FLOOR SHOW WHERE KEROSENE HAD BEEN THROWN TO ACCELERATE THE FIRE.



THIS REPRESENTS THE EFFECTS OF A FLASH FIRE IN A BEDROOM ON WASHINGTON BOULEVARD, CHICAGO, SHOWING THE RESULTS OF GASOLINE AND KEROSENE SATURATION. KEROSENE FOUND ON FLOOR, BEDDING AND FURNITURE. SPOTS OF KEROSENE STILL TO BE SEEN ON MATTRESS.



ANOTHER BEDROOM IN THE SAME BUILDING ON WASHINGTON BOULEVARD, SHOWING THE RESULTS OF GASOLINE FIRE. RUGS, BEDDING, ETC., ALSO SATURATED WITH KEROSENE.

J. J. HARRIS
CHICAGO

PART IV.

The Statistical Record

Find out the cause of this effect;

Or, rather say, the cause of this defect;

For this effect defective comes by cause.

—Hamlet II., 2.

STATISTICAL STATEMENT

AGGREGATE VALUE OF BUILDINGS AND CONTENTS SHOWING INSURANCE THEREON AND TOTAL DAMAGE BY FIRE IN THE STATE OF ILLINOIS FROM JANUARY 1, 1914, TO DECEMBER 31, 1914.

Total value of buildings in which fires have occurred.....	\$62,681,573
Total damage to said buildings	8,464,158
Total insurance on said buildings	35,645,138
Total value of contents of buildings in which fires occurred..	26,766,932
Total damage to said contents	6,889,689
Total insurance on said contents	17,170,138
Total fire loss in the State of Illinois	15,353,847
Total number of fires in the State of Illinois	11,605

AGGREGATE VALUE OF BUILDINGS AND CONTENTS SHOWING INSURANCE THEREON AND TOTAL DAMAGE BY FIRE OUTSIDE OF THE CITY OF CHICAGO FROM JANUARY 1, 1914, TO DECEMBER 31, 1914.

Total value of buildings in which fires have occurred.....	\$19,890,177
Total damage to said buildings	6,472,538
Total insurance on said buildings.....	10,567,130
Total value of contents of buildings in which fires occurred.	10,111,445
Total damage to said contents	4,304,814
Total insurance on said contents	6,043,670
Total fire loss outside the city of Chicago	10,777,352
Total number of fires outside the city of Chicago	7,571

AGGREGATE VALUE OF BUILDINGS AND CONTENTS SHOWING INSURANCE THEREON AND TOTAL DAMAGE BY FIRE IN THE CITY OF CHICAGO FROM JANUARY 1, 1914, TO DECEMBER 31, 1914.

Total value of buildings, in which fires have occurred.....	\$42,791,396
Total damage to said buildings	1,991,620
Total insurance on said buildings	25,078,008
Total value of contents of buildings, in which fires occurred.	16,655,487
Total damage to said contents	2,584,875
Total insurance on said contents	11,126,468
Total fire loss in the city of Chicago	4,576,495
Total number of fires in the city of Chicago	4,034

NUMBER OF FIRES IN THE STATE OF ILLINOIS, REPORTED TO THIS DEPART- MENT FROM JANUARY 1, 1914, TO DECEMBER 31, 1914.

January	672	August	1,062
February	844	September	885
March	918	October	671
April	983	November	1,337
May	1,046	December	1,182
June	975		
July	1,030		
			Total number of fires.. 11,605

*The above list includes only those fires which caused a damage of five dollars or over.

NUMBER OF FIRES OUTSIDE THE CITY OF CHICAGO, REPORTED TO THIS DEPARTMENT FROM JANUARY 1, 1914, TO DECEMBER 31, 1914.

January	424	August	772
February	466	September	655
March	641	October	404
April	683	November	844
May	675	December	618
June	690		
July	699	Total number of fires...	7,571

NUMBER OF FIRES IN THE CITY OF CHICAGO, REPORTED TO THIS DEPARTMENT FROM JANUARY 1, 1914, TO DECEMBER 31, 1914.

January	248	August	290
February	378	September	230
March	277	October	267
April	300	November	493
May	371	December	564
June	285		
July	331	Total number of fires...	4,034

INCENDIARY FIRES IN THE STATE OF ILLINOIS, REPORTED TO THIS DEPARTMENT FROM JANUARY 1, 1914, TO DECEMBER 31, 1914.

January	27	August	46
February	35	September	23
March	32	October	26
April	42	November	48
May	32	December	34
June	35		
July	37	Total number of fires...	417

INCENDIARY FIRES OUTSIDE THE CITY OF CHICAGO, REPORTED TO THIS DEPARTMENT FROM JANUARY 1, 1914, TO DECEMBER 1, 1914.

January	10	August	30
February	13	September	17
March	26	October	17
April	31	November	34
May	17	December	21
June	22		
July	21	Total number of fires...	259

INCENDIARY FIRES IN THE CITY OF CHICAGO, REPORTED TO THIS DEPARTMENT FROM JANUARY 1, 1914, TO DECEMBER 31, 1914.

January	17	August	16
February	22	September	6
March	6	October	9
April	11	November	14
May	15	December	13
June	13		
July	16	Total number of fires...	158

CLASSIFICATION OF PROPERTY IN THE STATE OF ILLINOIS, REPORTED TO THIS
DEPARTMENT FROM JANUARY 1, 1914, TO DECEMBER 31, 1914.

Automobiles	155	Morgues	1
Bakeries	51	Mills, saw	6
Asphalt plant	1	Office buildings	111
Banks	12	Oil houses	5
Barns	1,552	Power houses	16
Bridges	5	Photo studios	13
Boats	13	Pump houses	6
Breweries	6	Packing houses	8
Churches	59	Restaurants	76
Club houses	15	Round houses	3
Coal yards	5	Railway property	45
Creameries	4	Rooming houses	5
Depots	17	Saloons	142
Detention homes	1	Skating rinks	2
Dry kilns	1	Schools	75
Dwellings	5,735	Sheds	724
Derricks	1	Smoke houses	45
Dye houses	15	Steamers	1
Elevators	29	Storages	80
Engine houses	13	Stores	1,096
Factories	268	Silos	9
Fences	14	Tents	2
Foundries	9	Shops	191
Garages	113	Scale houses	1
Green houses	8	Theaters.....	33
Grain and hay	318	Tanks	15
Granaries	15	Warehouses	43
Halls, public	37	Pool and billiard halls....	26
Hotels	115	Commission houses	18
Hospitals	4	Cars	57
Jails	2	Vacant buildings	37
Ice houses	16	Boarding houses	6
Laundries	19	Fuel	1
Live stock	16	Towers	4
Lumber yards	29	Wagons	11
Laboratories	1	Boot black stands	1
Mines	7	Junk yards	1
Mills, flour	7		
Mills, planing	1		
			<hr/> 11,605

CLASSIFICATION OF THE FIRE LOSS IN THE STATE OF ILLINOIS, GIVING THE
NUMBER OF FIRES AND THE LOSS, CLASSIFIED ACCORDING TO
CAUSES, FROM JANUARY 1, 1914, TO DECEMBER 31, 1914.

Causes	No.	Amount
Chimneys, flues, cupolas and stacks, overheated or defective	1,066	\$ 822,510
Electricity	231	636,015
Explosions	79	589,060
Exposure	944	1,044,751
Firework, fire crackers, balloons, etc.	42	10,738
Friction	48	81,010
Gas—natural and artificial	39	22,682
Hot ashes and coals	87	33,955
Hot grease, oil, tar, wax, asphalt, ignition of.....	47	22,171
Hot or molten metal	41	25,495
Incendiarism	417	379,989
Lightning—buildings not rodded	570	1,035,936
Matches	821	360,645
Miscellaneous—causes known but not classified....	11	3,085
Open fires	200	100,792
Open lights	142	50,064
Petroleum and its products	696	1,216,506
Rubbish and litter	139	85,593
Smoking (cigars, cigarettes, pipes, etc.).....	166	83,838
Sparks—arising from combustion	1,731	873,379
Sparks—occasioned by running machinery, including pickers, carding machines, gins, etc. ....|..	9	58,163
Spontaneous combustion	255	550,582
Steam and hot water pipes	41	6,850
Stoves, furnaces, boilers and their pipes	774	701,222
Unknown	3,009	6,558,816
	11,605	\$15,353,847

DEATHS BY FIRE

There were two hundred eighty-seven deaths in Illinois during the year 1914 directly attributable to accidental burning. This does not include accidental deaths caused by explosions in mines, nor does it include those who met their death by burns due to scalds. There were upwards of two hundred people burned to death by being scalded by steam and hot water, and fifty-two miners met their death in a mine explosion which occurred at Royaltan, Illinois, October 27.

While it is a serious indictment against the intelligence of the people of the State of Illinois that two hundred eighty-seven people should have been burned to death in the year 1914, yet some satisfaction is obtained from the fact that this list is just one hundred less than the deaths by fire during the year 1913.

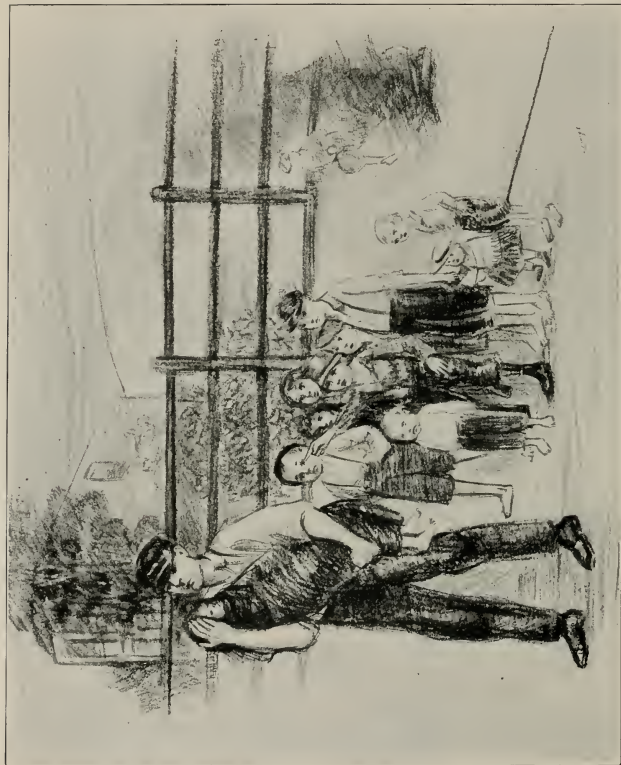
Following is a complete summary of the deaths by fire during the past year listed under the various causes:

Starting fires with kerosene	39
Clothing ignited by stoves and grates	39
Clothing ignited by matches	34
Gasoline explosions	27
Clothing ignited by bon-fires	27
Burned in burning buildings	26
Clothing ignited in manner unknown	24
Gas explosions	13
Clothing ignited by kerosene lamps	12
Electrocuted or burned by live wires	9
Dynamite explosions	9
Firework display explosions	6
Stove polish explosions	5
Clothing ignited by sparks from pipes	4
Struck by lightning	4
Clothing ignited by lighted candles	3
Fireworks set clothes on fire	2
Moving picture film explosions	2
Clothing ignited from christmas trees	2



STARTING THE KITCHEN FIRE WITH KEROSENE.

Thirty-nine women and girls burned to death by such explosions. This number is only one less than in 1913.



A BONFIRE TRAGEDY.

Twenty-seven children burned to death in Illinois last year by having their clothing set on fire from bonfires. This is twenty-eight less than in 1913, there having been fifty-five such accidents that year.

FINANCIAL STATEMENT

Expenditures of the Office of the State Fire Marshal from January 1, 1914, to December 31, 1914.

APPROPRIATION FOR DEPUTIES, CLERK HIRE, ETC.

Balance January 1, 1914	\$19,026.61	
Appropriation available July 1, 1914.....	38,280.00	
<hr/>		
Total	57,306.61	
Amount expended	37,686.77	
<hr/>		
Balance January 1, 1915.....		\$ 19,619.84

APPROPRIATION FOR RENT AND EXPENSES.

Balance January 1, 1914	\$ 7,100.70	
Appropriation available July 1, 1914.....	6,000.00	
<hr/>		
Total	13,100.70	
Amount expended	10,607.36	
<hr/>		
Balance January 1, 1915		\$ 2,493.34

APPROPRIATION FOR TRAVELING EXPENSES.

Balance January 1, 1914	\$21,233.87	
Appropriation available July 1, 1914	24,000.00	
<hr/>		
Total	45,233.87	
Amount expended	23,614.77	
<hr/>		
Balance January 1, 1915		\$ 21,619.10

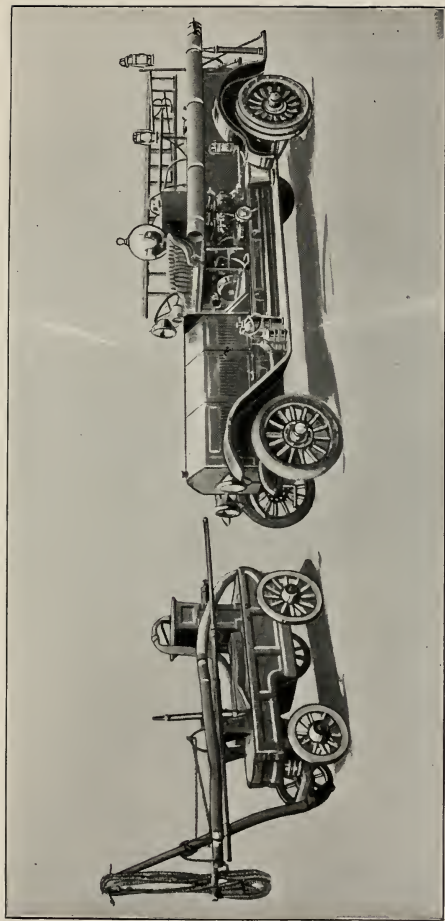
APPROPRIATION FOR STENOGRAPHER FEES.

Balance January 1, 1914	\$ 1,920.52	
Appropriation available July 1, 1914	3,000.00	
<hr/>		
Total	4,920.52	
Amount expended	2,933.89	
<hr/>		
Balance January 1, 1915		\$ 1,986.63

RECAPITULATION.

Appropriation for deputies, clerks, etc.....	\$57,306.61	
Appropriation for rent and expenses	13,100.70	
Appropriation for traveling expenses	45,233.87	
Appropriation for stenographer fees	4,920.52	
<hr/>		
Total appropriations		\$120,561.70

Amount expended, appropriation for deputies, etc..	\$37,686.77
Amount expended, appropriation for rent and ex- penses	10,607.36
Amount expended, appropriation for traveling ex- penses	23,614.77
Amount expended, appropriation for stenographer fee?	2,933.89
	<hr/>
Total expended	\$ 74,842.79
	<hr/>
Total balance	\$ 45,718.91



THE OLD AND THE NEW.

A Striking illustration of the first and last word in fire fighting apparatus. Both of the above are pictures of horseless carriages—the one before horses were ever used to draw an engine and the other after the horse has been abandoned.

MUNICIPAL RESPONSIBILITY

The State Fire Marshal Department of Illinois cannot do it all. Fire waste is the one big loss that ought to receive the intelligent attention of the City Council in cities, and the Board of Trustees in villages. A proper and well regulated inspection, by the local authorities of each city and village, of the local fire traps and fire hazard conditions, will result in a greater saving of money to that community than any other public investment of which we have any knowledge.

FIRE LOSSES IN ILLINOIS CITIES

A Comparative Statement of the Number of
Fires, Fire Losses and Other Data in
Those Cities of Illinois Having
More Than 15,000 Population.



FIRE CHIEF THOMAS O'CONNOR
CITY OF CHICAGO

Fire loss in 1913,	\$5,600,000
Fire loss in 1914,	4,567,495
<hr/>	
Decrease for 1914,	\$1,023,495
Per capita fire loss,	\$ 1.83



CHIEF T. N. WORM

EAST ST. LOUIS

Population, 71,000.
 Total number of fires, 512.
 Loss on buildings, \$269,775.
 Loss on personal property,
 \$170,668.
 Total fire loss, \$440,443.
 Loss per fire, \$860.
 Per capita loss, \$6.20.
 Fire loss in 1913, \$637,540.
 Decrease for 1914, \$197,100.
 Number of men in Department,
 68.
 Number of fire stations, 6.
 Number of pieces of motor ap-
 paratus, 2.
 Fire Chief, M. J. Tobin.
 Assistant Chief, Philip Thomas.



CHIEF M. J. TOBIN

PEORIA

Population, 72,000.
 Total number of fires, 574.
 Loss on buildings, \$115,810.
 Loss on personal property
 \$240,847.
 Total fire loss, \$356,657.
 Loss per fire, \$620.
 Per capita loss, \$4.95.
 Fire loss in 1913, \$407,987.
 Decrease for 1914, \$51,330.
 Number of men in Department,
 82.
 Number of fire stations, 10.
 Number of pieces of motor ap-
 paratus, 3.
 Fire Chief, T. N. Worm.
 Assistant Chiefs, Edwin Sites
 and Benjamin Butler.



CHIEF C. W. ROYCE

JOLIET

Population, 40,000.
 Total number of fires, 255.
 Loss on buildings, \$16,131.
 Loss on personal property,
 \$7,771.
 Total fire loss, \$23,902.
 Loss per fire, \$93.70.
 Per capita loss, \$.59.
 Fire loss in 1913, \$11,557.
 Increase in 1914, \$12,345.
 Number of men in Department,
 40.
 Number of fire stations, 5.
 Number of pieces of motor ap-
 paratus, 4.
 Fire Chief, C. W. Royce.
 Assistant Chief, Thomas Ruddy.

STREATOR

Population, 16,000.
 Total number of fires, 120.
 Loss on buildings, \$10,106.53.
 Loss on personal property,
 \$4,671.78.
 Total fire loss, \$14,778.31.
 Loss per fire, \$123.
 Per capita loss, \$.91.
 Fire loss in 1913, \$19,621.19.
 Decrease for 1914, \$4,842.88.
 Number of men in Department,
 10.
 Number of fire stations, 2.
 Number of pieces of motor ap-
 paratus, 0.
 Fire Chief, F. A. Owen.
 Assistant Chief, Daniel Worrells.



CHIEF F. A. OWEN



CHIEF F. E. THOMAS

ROCKFORD

Population, 54,000.
 Total number of fires, 262.
 Loss on buildings, \$10,476.28.
 Loss on personal property,
 \$7,308.67.
 Total fire loss, \$17, 784.95.
 Loss per fire, \$67.88.
 Per capita loss, \$.32.
 Fire loss in 1913, \$59,464.
 Decrease for 1914, \$41,679.05.
 Number of men in Department,
 67.
 Number of fire stations, 6.
 Number of pieces of motor ap-
 paratus, 7.
 Fire Chief, F. E. Thomas.
 Assistant Chief, S. T. Julian.

QUINCY

Population, 40,000.
 Total number of fires, 244.
 Loss on buildings, \$36,201.
 Loss on personal property,
 \$61,335.
 Total fire loss, \$97,536.
 Loss per fire, \$393.
 Per capita loss, \$2.44.
 Fire loss in 1913, \$504,000.
 Decrease for 1914, \$406,464.
 Number of men in Department,
 43.
 Number of fire stations, 8.
 Number of pieces of motor ap-
 paratus, 3.
 Fire Chief, George Marriott.
 Assistant Chief, Ed. Yates.



CHIEF GEORGE MARRIOTT



CHIEF G. J. RANG

AURORA

Population, 36,000.
 Total number of fires, 180.
 Total fire loss, \$30,306.62.
 Loss per fire, \$168.
 Per capita loss, \$.84.
 Fire loss in 1913, \$51,973.
 Decrease for 1914, \$21,667.
 Number of men in Department, 30.
 Number of fire stations, 5.
 Number of pieces of motor apparatus, 3.
 Fire Chief, George J. Rang.
 Assistant Chief, H. Hamsmith.

GALESBURG

Population, 26,000.
 Total number of fires, 193.
 Loss on buildings, \$42,307.
 Loss on personal property, \$21,760.
 Total fire loss, \$64,067.
 Loss per fire, \$331.
 Per capita loss, \$2.46.
 Fire loss in 1913, \$43,250.
 Increase in 1914, \$20,817.
 Number of men in Department, 17.
 Number of fire stations, 3.
 Number of pieces of motor apparatus, 0.
 Fire Chief, M. J. Peterson.
 Assistant Chief, John Cafes.



CHIEF M. J. PETERSON



CHIEF HENRY MAYER

BLOOMINGTON

Population, 30,000.
 Total number of fires, 185.
 Loss on buildings, \$11,717.90.
 Loss on personal property,
 \$7,338.19.
 Total fire loss, \$19,056.09.
 Loss per fire, \$103.
 Per capita loss, \$.60.
 Loss in 1913, \$26,177.
 Decrease for 1914, \$7,421.
 Number of men in Department,
 34.
 Number of fire stations, 5.
 Number of pieces of motor ap-
 paratus, 2.
 Fire Chief, Henry Mayer.
 Assistant Chief, Charles Abrams.

ELGIN

Population, 26,000.
 Total number of fires, 132.
 Total fire loss, \$24,100.
 Loss per fire, \$182.
 Per capita loss, \$.92.
 Loss in 1913, \$45,000.
 Decrease for 1914, \$20,900.
 Number of men in Department,
 27.
 Number of fire stations, 5.
 Number of pieces of motor ap-
 paratus, 1.
 Fire Chief, William Haible.



CHIEF WILLIAM HAIBLE



CHIEF H. C. KUNZ

BELLEVILLE

Population, 25,000.
 Total number of fires, 142.
 Loss on buildings, \$13,409.
 Loss on personal property,
 \$2,591.
 Total fire loss, 16,000.
 Loss per fire, \$112.
 Per capita loss, \$.64.
 Fire loss in 1913, \$32,000.
 Decrease for 1914, \$16,000.
 Number of men in Department,
 18.
 Number of fire stations, 2.
 Number of pieces of motor ap-
 paratus, 0.
 Fire Chief, H. C. Kunz.

DANVILLE

Population, 33,000.
 Total number of fires, 312.
 Loss on buildings, \$27,730.69.
 Loss on personal property,
 \$52,148.37.
 Total fire loss, \$79,879.06.
 Loss per fire, \$256.
 Per capita loss, \$2.42.
 Fire loss in 1913, \$82,000.
 Decrease for 1914, \$2,120.94.
 Number of men in Department,
 36.
 Number of fire stations, 6.
 Number of pieces of motor ap-
 paratus, 3.
 Fire Chief, Perry Cessna.



CHIEF PERRY CESSNA



CHIEF G. W. NEWBERRY

ROCK ISLAND

Population, 25,000.
 Total number of fires, 192.
 Loss on buildings, \$19,994.92.
 Loss on personal property,
 \$10,211.42.
 Total fire loss, \$30,206.42.
 Loss per fire, \$157.
 Per capita loss, \$1.21.
 Fire loss in 1913, \$342,000.
 Decrease for 1914, \$311,793.58.
 Number of men in Department,
 27.
 Number of fire stations, 5.
 Number of pieces of motor ap-
 paratus, 3.
 Fire Chief, G. W. Newberry.
 Assistant Chief, Peter Frey.

MOLINE

Population, 25,000.
 Total number of fires, 181.
 Loss on buildings, \$16,888.53.
 Loss on personal property,
 \$6,770.10.
 Total fire loss, \$23,658.63.
 Loss per fire, \$130.71.
 Per capita loss, \$.94.
 Fire loss in 1913, \$35,000.
 Decrease for 1914, \$11,341.37.
 Number of men in Department,
 26.
 Number of fire stations, 4.
 Number of pieces of motor ap-
 paratus, 7.
 Fire Chief, J. Q. Hawk.



CHIEF J. Q. HAWK

CHAMPAIGN



CHIEF JOHN ELY

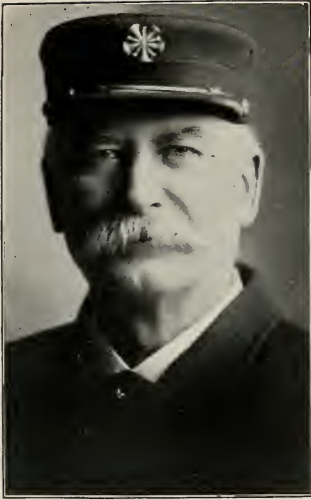
Population, 17,000.
 Total number of fires, 120.
 Loss on buildings,
 \$21,892.61.
 Loss on personal property,
 \$10,042.49.
 Total fire loss, \$31,935.10.
 Loss per fire, \$266.
 Per capita loss, \$1.88.
 Fire loss in 1913, \$47,338.93.
 Decrease for 1914,
 \$15,403.83.
 Number of men in Department, 10.
 Number of fire stations, 1.
 Number of pieces of motor apparatus, 2.
 Fire Chief, John Ely.
 Assistant Chief, Roy Alsip.

KANKAKEE

Population, 15,000.
 Total number of fires, 66.
 Total fire loss, \$6,745.
 Loss per fire, \$102.
 Per capita loss, \$.45.
 Fire loss in 1913, \$10,490.
 Decrease for 1914, \$3,745.
 Number of men in Department, 10 (paid).
 Number of fire stations, 2.
 Number of pieces of motor apparatus, 2.
 Fire Chief, M. S. Baker.
 Assistant Chief, Emil Goodrow.



CHIEF M. S. BAKER



CHIEF J. F. RODEMEYER

FREEPORT

Population, 21,000.
 Total number of fires, 168.
 Total fire loss, \$8,609.45.
 Loss per fire, \$51.24.
 Per capita loss, \$.41.
 Fire loss in 1913, \$53,808.
 Decrease in 1914, \$45,198.55.
 Number of men in Department,
 19.
 Number of fire stations, 3.
 Number of pieces of motor ap-
 paratus, 4.
 Fire Chief, J. F. Rodemeyer.

EVANSTON

Population, 32,000.
 Total number of fires, 267.
 Loss on buildings, \$53,898.
 Loss on personal property,
 \$14,853.
 Total fire loss, \$68,751.
 Loss per fire, \$257.
 Per capita loss, \$2.14.
 Fire loss in 1913, \$24,000.
 Increase in 1914, \$44,751.
 Number of men in Department,
 34.
 Number of fire stations, 3.
 Number of pieces of motor ap-
 paratus, 2.
 Fire Chief, A. N. Hofstetter.
 Assistant Chief, T. H. Norman.



CHIEF A. N. HOFSTETTER



CHIEF C. W. DEVORE

DECATUR

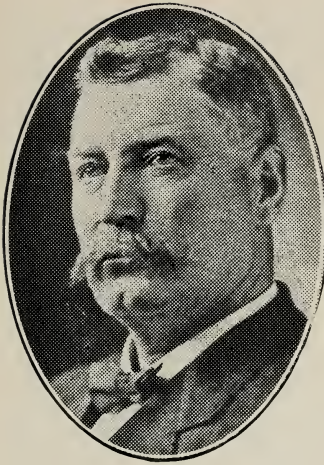
Population, 35,000.
 Total number of fires, 288.
 *Total fire loss, \$626,129.40.
 Loss per fire, \$2,174.06.
 Per capita loss, \$17.89.
 Fire loss in 1913, \$65,000.
 Increase in 1914 \$561,129.
 Number of men in Department, 33.
 Number of fire stations, 4.
 Number of pieces of motor apparatus, 5.
 Fire Chief, C. W. Devore.
 Assistant Chief, Edward Platt.
 *550,000. of this loss came from one fire which totally destroyed the Powers block.

SPRINGFIELD

Population, 60,000.
 Total number of fires, 515.
 Loss on buildings, \$70,049.83.
 Loss on personal property, \$38,309.29.
 Total fire loss, \$108,359.12.
 Loss per fire, \$210.
 Per capita loss, \$1.80.
 Fire loss in 1913, \$276,136.
 Decrease for 1914, \$167,777.
 Number of men in Department, 67.
 Number of fire stations, 8.
 Number of pieces of motor apparatus, 2.
 Fire Chief, Henry Bolte.
 Assistant Chief, Matthew Cullen.



CHIEF HENRY L. BOLTE



CHIEF J. C. WOOD

JACKSONVILLE

Population, 17,000.
 Total number of fires, 95.
 Total fire loss, \$67,641.
 Loss per fire, \$712.
 Per capita loss, \$3.90.
 Number of men in Department,
 9.
 Number of fire stations, 1.
 Number of pieces of motor ap-
 paratus, 0.
 Fire Chief, J. C. Wood.
 Assistant Chief, J. E. Harvey.

ALTON

Population, 20,000.
 Total number of fires, 131.
 Loss on buildings, \$42,090.21.
 Loss on personal property,
 \$17,195.
 Total fire loss, \$59,285.21.
 Loss per fire, \$452.50.
 Per capita loss, \$2.96.
 Fire loss in 1913, \$67,000.
 Decrease for 1914, \$7,714.79.
 Number of men in Department,
 15 regular, 8 extra.
 Number of fire stations, 5.
 Number of pieces of motor ap-
 paratus, 2.
 Fire Chief, Adolph Hunt.
 Assistant Chief, William Feld-
 wisch.



CHIEF ADOLPH HUNT



CHIEF SARS O'FARRELL

WAUKEGAN

Population, 18,000.
 Total number of fires, 125.
 Loss on buildings, \$7,000.
 Loss on personal property,
 \$14,000.
 Total fire loss, \$21,000.
 Loss per fire, \$168.
 Per capita loss, \$1.16.
 Fire loss in 1913, \$18,000.
 Increase in 1914, \$3,000.
 Number of men in Department,
 14.
 Number of fire stations, 2.
 Number of pieces of motor ap-
 paratus, 2.
 Fire Chief, Sars O'Farrell.
 Assistant Chief, D. A. Hutton.

OAK PARK

Population, 27,000.
 Total number of fires, 127.
 Loss on buildings, \$20,051.62.
 Loss on personal property,
 \$10,989.42.
 Total fire loss, \$31,041.04.
 Loss per fire, \$244.41.
 Per capita loss, \$1.14.
 Fire loss in 1913, \$64,390.
 Decrease for 1914, \$33,349.
 Number of men in Department,
 19.
 Number of fire stations, 3.
 Number of pieces of motor ap-
 paratus, 1.
 Fire Chief, H. J. Schoff.
 Assistant Chief, George Houren.



CHIEF H. J. SCHOFF,



CHIEF M. S. PHILIP

CHICAGO HEIGHTS

Population, 16,000.
 Total number of fires, 102.
 Loss on buildings, \$7,570.
 Loss on personal property,
 \$9,880.
 Total fire loss, \$17,450.
 Loss per fire, \$171.
 Per capita loss, \$1.09.
 Fire loss in 1913, \$26,200.
 Decrease for 1914, \$8,750.
 Number of men in Department,
 13 (paid).
 Number of fire stations, 2.
 Number of pieces of motor ap-
 paratus, 1.
 Fire Chief, M. S. Philip.
 Assistant Chief, Elmer E. Somes.

PART V.

Miscellaneous

FILM BLAZE KILLS 2 AND INJURES 31.

Moving Picture Films Responsible for a Fire Which Wrecks Burlington Coach.

On the evening of December 24, just as the passengers on a suburban train on the C. B. & Q. railroad had settled down to their evening papers, and as the train was crossing the street viaduct at California avenue, Chicago, suddenly there was a flash of white light, flames burst from all sides of the smoker, and in a moment the entire car was ablaze. Passengers leaped from the doors and windows of the moving train, and in their frenzy to reach the exits several were trampled upon and seriously injured and a number dangerously burned. The train was stopped at Kedzie avenue and the car disconnected from the train and the fire extinguished.

Thirty-three people were seriously injured in this catastrophe, two of whom, Henry L. Rich, Mayor of Berwyn, and Frank L. Poultney, another resident of that suburb, afterward died at St. Anthony's hospital.

It is stated that motion picture films, intended for theaters at Berwyn, Congress Park, Cicero, Clyde and Riverside, had exploded and caused this accident. No other reason can be found for the sudden sweep of flames. It is also stated that these films were being transported contrary to the ordinance of the city of Chicago, which provides that all motion picture films in transit shall be enclosed in metal boxes.

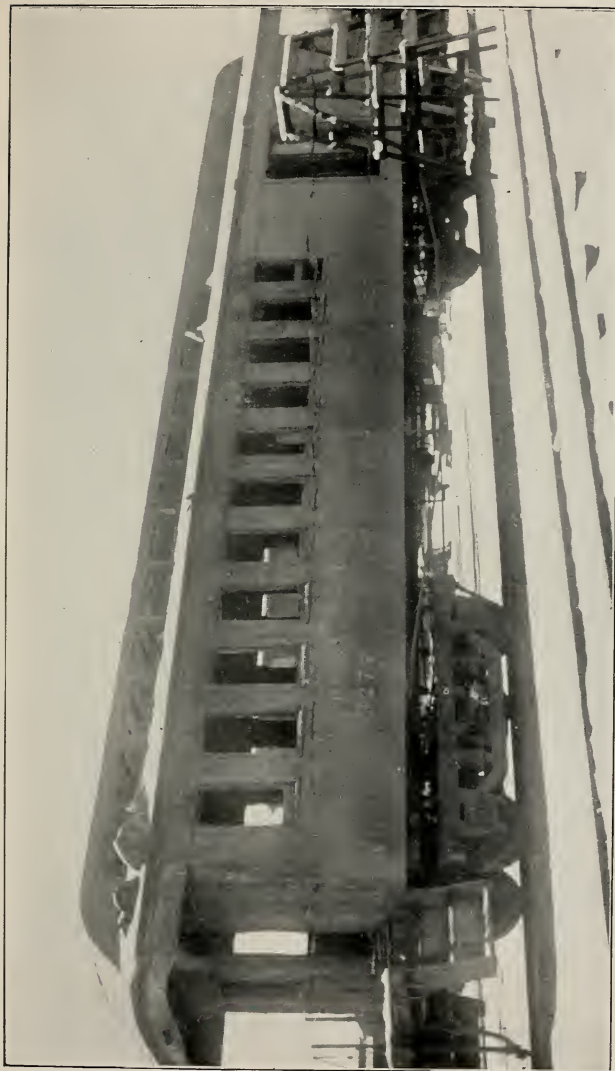
The coroner of Cook county made an exhaustive inquiry into this casualty and about thirty-five witnesses testified at the inquiry. The jury decided that the fire was caused by the burning of celluloid motion picture films which had been placed between two of the seats in the front end of the car by one Joel Johnson of Berwyn, Illinois.

It is probable that these picture films were either placed too close to the hot steam pipes, or that they were ignited by someone carelessly tossing a lighted cigar or cigarette on the bundle.

The moving picture film is in reality a long reel of celluloid. Celluloid takes fire with a flash and burns quickly, making a great deal of heat. This is because it has within it a great deal of oxygen, which is released and supports the combustion.

The films were placed in the front end of the car and when the fire ensued both the front and rear doors were open, and the motion of the train created such a draught that the car was almost instantly filled with flame.

This Department expects to recommend to the present legislature that it enact a law regulating the matter of carrying motion picture films on street cars, elevated trains and passenger cars in the State of Illinois.



EXTERIOR VIEW OF THE BURLINGTON SMOKING CAR IN WHICH AN EXPLOSION OCCURRED DECEMBER 24, 1914. PRESUMABLY CAUSED BY THE EXPLOSION OF CELLULOIDE MOVING PICTURE FILMS, TWO WERE KILLED AND THIRTY-ONE SERIOUSLY INJURED IN THIS ACCIDENT.



INTERIOR VIEW OF SAME CAR, SHOWING RESULTS OF EXPLOSION AND
THE INTENSE HEAT OF THE FIRE WHICH IMMEDIATELY FOLLOWED.

A MADE-TO-ORDER FIRE

Chicago Celebrates Fire Prevention Day by Burning Two Houses, Typifying Construction Allowed Outside Present Fire Limits and Demanded Inside Same Lines.

(From "Brick and Clay Record," October 20, 1914.)

October ninth was celebrated as Fire Prevention Day in several states, New York, Illinois and Ohio being particularly marked.

In Chicago an elaborate program was followed, the most notable event of the day being the destruction by fire of two houses built for the purpose of giving an ocular demonstration of the necessity of extending the fire limits of the middle west metropolis.

The Chicago Chapter of the National Fire Protection Association was responsible for this feature. In view of the fact that an ordinance extending the fire limits is now pending in Chicago's Board of Councilmen and is to be brought to a vote very shortly, it was decided to show the aldermen and property owners generally what fire would do to the type of buildings which, while prohibited within the fire limits, abound outside.

The co-operation of the Building Department, the Fire Department and the Fire Prevention Bureau was secured and the South Park Board gave permission for the erection of two cottages of the type generally occupied by workingmen. These were erected in Grant Park, within a comparatively small distance of the lake front.

The cottages were designed by Frank D. Chase, an architect who was formerly chairman of the fire prevention committee of the City club. They were identical in size and arrangement except that one was built of brick with fire-resisting roof and the other of frame with shingle roof. The cottages were 26 by 18 feet, with four rooms partitioned off but not finished. The walls of the brick cottage were 13 inches thick,

as is required by the city building ordinance, and the chimneys of both cottages were of brick.

The frame house was ceiled inside and out with $\frac{5}{8}$ -inch drop siding. All of the interior partitions of both houses were 2 by 4 inch stud partitions ceiled on one side only with $\frac{5}{8}$ -inch siding. The ceilings were covered with approved wall board, securely fastened to rafters.

The frame cottage was sheathed open for shingles, with $\frac{5}{8}$ -inch sheathing, and the roof of the brick house was sheathed with $\frac{5}{8}$ -inch sheathing, laid tight for ready-roofing. The frame house was roofed with wooden shingles laid $5\frac{1}{2}$ inches to the weather, while the brick house was covered with "ready-roofing." The windows in both houses were glazed and doors were hung, and the exterior woodwork was given a coat of paint.

The actual cost of the construction of the frame house was \$629.00. The cost of the brick house was exactly \$640.05. Insurance experts stated that the insurance rate on the frame house would have been fifty cents—and on the brick house twenty cents per thousand dollars of valuation.

The erection of these houses in Grant Park, which faces some of Chicago's most substantial structures, attracted wide attention. Their burning as a feature of Fire Prevention Day, and as a test of the two types of construction, had been widely advertised and it is estimated that 25,000 people were present at noon of that day, the time set for the demonstration.

The city firemen placed a bale of excelsior in each building under identical conditions and these bales were saturated with kerosene.

Chicago's fire department was scheduled to give an exhibition drill a short time prior to the hour when the cottages illustrated herewith were to be set on fire. At the conclusion of this drill a bomb was exploded, notifying the men in charge of the cottages that all was in readiness so far as the fire department itself was concerned.

At a given signal the fires were simultaneously started in both houses and it was not until the flames could be seen through the windows in each house that a second bomb was exploded, in this case to give the fire department the "alarm".

The place of the exhibition drill was comparatively close and as a consequence the firemen allowed a brief time to elapse before starting for the scene of the conflagration. This time, it was judged, was equal to the time that would be consumed by the average citizen in finding a fire alarm box and giving the signal; to this, then, was added the time

that it would take for the firemen to harness the engines and trucks and to make their way from a comparatively distant fire station through crowded streets.

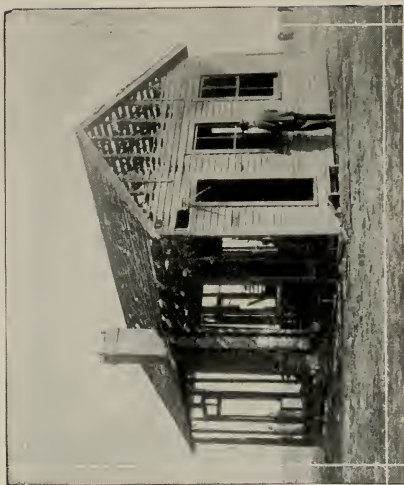
Flames had appeared through the roof of the frame house and it was well on its way to demolition when the fire department arrived. The hose was unreeled and the water turned on in record time and the flames were extinguished in short order. The stop watches gave the time as slightly more than three minutes for the brick house and slightly less than ten minutes for the frame.

The result is shown in the accompanying illustrations—the frame structure was a total wreck for all habitable purposes, while the brick cottage was structurally intact. In the brick house the door and window sashes were badly charred and would require replacing, and the interior partitions and trimmings were badly burned, but the essential features of the cottage were as good as ever.

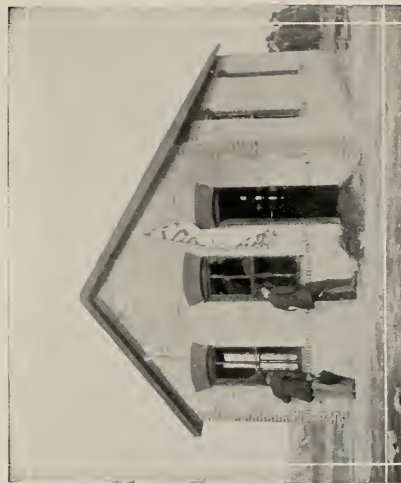
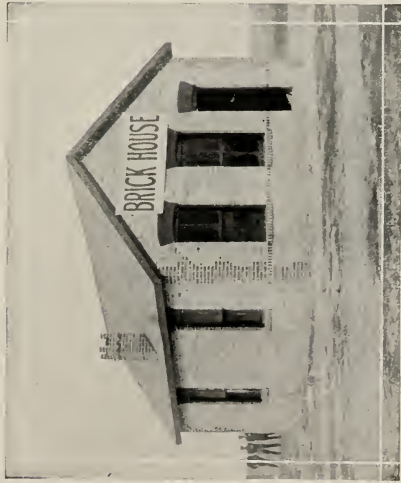
The object lesson of all this was not lost upon the immense crowd, nor, it is to be hoped, was it lost upon the officials who will have to do with the question of extending Chicago's fire limits.

It required no imagination to understand, in addition to the lesson shown by the two buildings themselves, the great menace a burning frame cottage would be to neighboring buildings and the fire hazard which could be easily created if a number of these frame and shingle roofed dwellings caught fire from each other and were made to burn at one time.

An interesting point has been brought out, also, regarding the "salvage" on the two types. The letters printed herewith, one from F. M. Lloyd, president of the Lloyd-Thomas Company, probably the largest and best known firm of appraisers, show that there was a salvage (that is, materials that could be used again) representing eighty per cent of the value of the brick house. That means that, after this house had "gone through the fire," it could be made "as good as new" for about \$128. The frame house, on the other hand, was a total loss—\$629 gone up in smoke.



THE FRAME HOUSE, BEFORE AND AFTER THE FIRE.
 This House Cost \$629 and, When the Fire Was Extinguished, Would Have to Be Torn Down to Be Rebuilt.



THE BRICK HOUSE, BEFORE AND AFTER THE FIRE.

This House Cost \$640 and, When the Fire was Extinguished, Could Have Been Rebuilt for \$128.

THE LLOYD-THOMAS CO.
APPRAISERS, ENGINEERS,
Chicago, Ill.

Oct. 19, 1914.

Mr. Frank D. Chase, President, Chicago Chapter of National Fire Protection Association.

DEAR SIR:—We have been asked to estimate the salvage remaining in two small cottages burned in a fire test in Grant Park, Chicago, on Fire Prevention Day, under the auspices of the Chicago Chapter of the National Fire Protection Association.

One of these was a small frame one-story building, 18 x 26 feet, costing about \$625; the other a one-story brick of the same size, costing about \$650, both being tested in the same manner.

Our estimate is that the frame building is a practically total loss, while the brick shows nearly if not quite an 80 per cent salvage.

Yours very truly,

THE LLOYD-THOMAS CO.

BY F. M. LLOYD, PRESIDENT.

R. J. RICHARDS & CO.
INSURANCE.
175 W. Jackson Blvd.

Chicago, Oct. 19, 1914.

Mr. Frank D. Chase, President, Chicago Chapter National Fire Protection Association, Chicago.

DEAR SIR:—In regard to the damage sustained in two cottages built on the lake front and set afire for demonstration purposes, Fire Prevention Day, city of Chicago:

We consider the frame cottage a total loss and would expect to make settlement on such a building for the face value of the policy, providing it did not exceed the cost of the building. In regard to the brick building, we estimate the loss on this from 20 to 25 per cent.

Yours very truly,

R. J. RICHARDS & CO.

BY R. J. RICHARDS.

THE BURNING QUESTION OF THE HOUR

Personal Responsibility for Fires.

Personal and individual responsibility for damage by fire is a revolutionary doctrine only, in that it applies to such inquiry a well known and recognized important principle of law. It really is but an amplification of the doctrine of negligence, which is applied to many acts, both of omission and commission, of a person who has relations with and duties to another.

We Americans are by nature, inclination and education the most reckless, the most careless, and the most extravagant people on the face of the earth. How often have we heard it stated that we waste more than would support a like number of people anywhere on Continental Europe, and I think that any one who is now following conditions on that unhappy continent will immediately recognize that this is true.

Prosperity in America eliminates frugality. The great middle class of people, which constitutes such an important part of our population, is not a class of conservation. The fast and furious age in which we live keeps us on high speed all the time, and this condition of living does not beget habits of carefulness.

Our people do not seem to realize that it is much easier to preserve that which we have than it is to create or recreate that which we spend or lose; and particularly is this true of the great destruction and loss of our accumulations by fire.

It is surprising how many people are still of the opinion that a loss "fully covered by insurance" is no loss at all; that such a condition is an even break. The property owner is looked upon as a man of wisdom and prudence who thus guards against what would otherwise be a personal calamity; never seeming to realize that insurance money is simply and solely a contribution made by the respective members of an organization to replace that which is nearly always a preventable loss. It therefore must follow, as the night the day, that the more losses the more contributions, the more dancing the more pay for the fiddler.

Quite an agitation is on at the present time all over the country for the investigation, regulation and reduction of insurance rates and cost. With the merits of this controversy we have, at this time, no concern. It is, however, self evident that the greater the fire loss in the country the greater the insurance cost. In an effort to reduce the tremendous fire waste, we have appealed to the people to be more careful, and the fires increase; we have warned them against their own folly, and the losses grow greater; we have preached the necessity of conservation, and the destruction goes madly on. What, then, can we do? What, then, must we do?

My belief is that the ultimate and complete solution of this great conservation question is personal and individual responsibility for loss by a preventable fire.

It is now provided by law that the owner of a carriage operating on the public highway must answer in damages for any injury he occasions; that a person operating dangerous machinery must look out for people coming in contact therewith; that a railroad or public carrier must pay all damages it occasions by its negligent acts of omission or commission; and that people generally must so use their own as not to injure another.

What good reason, therefore, can be assigned for not writing into the law of our land a provision which shall make individuals likewise responsible for injuring others by their wilful negligence in having fires or allowing them to occur; and if a person is so negligent of his own property as to allow a preventable fire to occur, and that fire is communicated to and destroys his neighbor's property, why should he not be held accountable therefor?

After all, we are not without kindred legislation along this line. Only recently the supreme court of Missouri has held that the failure of the owner to erect a fire escape, as provided by law, renders him liable in an action for damages for the loss of a life in the burning building. The supreme court of New York has held that, upon an order being issued to install a sprinkler equipment in a factory, the failure of the owner to comply with such order made him liable to the fire department for the cost of putting out the fire, amounting to \$1,500. And again the same court held that where a motion picture film company stored films in a building without a permit, as required, it was liable to pay the fire department the full cost of extinguishing the fire. The St. Louis circuit court handed down a decision the other day awarding a young woman damages amounting to \$8,000 against both the maker of and dealer in a liquid stove polish which exploded while she was using it,

causing serious burns to herself. It would, therefore, appear that there is no valid reason why we should not fix personal responsibility for fires due to carelessness or neglect, so that whosoever suffers thereby shall receive a measure of recompense.

The legislature of Illinois can do no greater work toward property conservation than to enact into law some measure along the following line:

"Be it enacted by the People of the State of Illinois, represented in the General Assembly: Any person, persons, or corporation, for any fire caused by, resulting from, or spreading by reason of the commission of the crime of arson, or of burning to defraud, or by reason of the negligence of such person, persons or corporation, or the non-compliance with any law or ordinance or lawful regulation or requirement of or by any state or municipal authority, shall be liable: 1st, for all loss, expense or damage caused by or resulting from such negligence or non-compliance; and, 2d, for any expense incurred by any municipal or other governmental agency in extinguishing or attempting to extinguish any fire so caused, resuting or spreading. *Provided*, that nothing herein contained shall affect any liability of any insurance company, corporation or association, under any policy of insurance or any property destroyed or damaged."

A resolution to be adopted by the Boards of Education in cities in the State of Illinois:

Be it resolved by the Board of Education in the city of.....: It shall be the duty of the superintendent of schools, and he is hereby instructed to require teachers of public schools in all buildings of more than one story to have at least one fire drill each month, and to require all teachers of such schools, whether occupying buildings of one or more stories, to keep all doors and exits of their respective rooms and buildings unlocked during school hours.

It shall be the duty of all teachers to instruct their pupils in at least one lesson in each quarter of the school year with reference to the causes and dangers of fire, the material for such instruction to be secured from the State Fire Marshal or any other reliable source.

Any teacher failing to comply with the provisions of this resolution shall be subject to discipline, and for a continual refusal to comply therewith subject to removal.

The following comprise the roster of officers and employes of the State Fire Marshal Department:

SPRINGFIELD OFFICE

WALTER H. BENNETT,
State Fire Marshal.

F. R. MORGARIDGE,
Assistant State Fire Marshal.

W. S. HOOPES,
First Deputy State Fire Marshal.

MRS. MAE S. JONES,
Stenographer.

MISS MARY A. GORMAN
Stenographer.

MISS NELLE SUTTON,
Statistician.

ALEX. PERRY,
Janitor.

FIELD DEPUTIES

A. H. BOGARDUS, Springfield.

TONY BRUCKS, East St. Louis.

GEORGE J. BYRNES, Springfield.

ROBERT E. DAILY, Canton.

J. E. GALLIVAN, Champaign.

ROBERT HARPER, Rock Falls.

EDWARD HOLLAND, Bloomington.

S. LEGREID, Centralia.

R. B. LYTTON, Metropolis.

L. C. McMURTRIE, Lacon.

CHAS. J. ROBERTS, Champaign.

WILLIAM F. RYAN, Peoria.

HENRY J. SLOAN, Danville.

J. Q. SNEDEKER, Marion.

HUGH G. STRUMPFER, Springfield.

CHICAGO OFFICE

A. A. BACH,
Chief Deputy State Fire Marshal.

FRANK L. SALISBURY,
Second Deputy State Fire Marshal.

MISS OLIVE M. WILHITE,
Stenographer.

MISS DELLA ELMER,
Stenographer.

DEPUTIES

MICHAEL E. DALTON,

MICHAEL J. DURR,

THOMAS A. GREELY,

WILLIAM J. HANAFIN,

NIELS JUUL, Jr.,

JOHN J. McKENNA,

GEORGE E. O'DONNELL,

WILLIAM R. PRICE.

FIFTH ANNUAL REPORT
OF THE
STATE FIRE MARSHAL

OF THE STATE OF

ILLINOIS

FOR THE YEAR

1915



WALTER H. BENNETT
State Fire Marshal



SCHNEPP & BARNES, STATE PRINTERS
SPRINGFIELD, ILL.
1916.

[Printed by authority of the State of Illinois.]



WALTER H. BENNETT.
State Fire Marshal of Illinois.

LETTER OF TRANSMITTAL.

SPRINGFIELD, ILL., February 1, 1916.

Hon. Rufus M. Potts, Superintendent of Insurance, Springfield, Illinois.

MY DEAR SIR: I have the honor to submit to you herewith, in accordance with section 15 of an act creating the office of the State Fire Marshal, prescribing his duties, etc., the Fifth Annual Report of the State Fire Marshal Department of Illinois, the same covering the operation of that department from January 1, 1915, to December 31, 1915, inclusive.

All of which is respectfully submitted,

WALTER H. BENNETT,
State Fire Marshal.

2918118-5609 VSC

TO THE STATE'S ATTORNEYS OF ILLINOIS.

To those officers in the State of Illinois who, through the vigorous and effective prosecution of those persons charged with various forms of incendiarism, have done much to decrease the crimes of arson and burning to defraud, and, thereby, been instrumental in reducing the fire loss in this State, viz, The STATE'S ATTORNEYS of ILLINOIS, is this, the Fifth Annual Report of the State Fire Marshal Department, respectfully dedicated.

"It has been truly said that we are all creatures of habit, and the establishment and growth of the habit of carelessness reaches beyond the present generation and is not subject to radical change within a short period. However, by continual educational propaganda initiated in the schoolroom and followed through the citizenship generally, by revision and enforcement of building codes by public officials, the encouragement of constant and efficient inspections, the education of the school children in domestic hazards, watchful supervision of the storage and use of matches, combustibles, explosives and inflammable liquids, enactment of desirable laws and ordinances, the protection of schools, public halls, theaters and factories, will be found the hope of ultimate reduction of our fire waste."



CAPITOL BUILDING SPRINGFIELD.

ANNUAL REPORT, FIRE MARSHAL DEPARTMENT, STATE OF ILLINOIS.

In the preparation of this annual report it has been thought wise to divide it into five parts, namely: Part I.—Department of Education. II.—Department of Inspection. III.—Department of Investigation. IV.—The Statistical Record. V.—Miscellaneous.

COMPARATIVE STATEMENT.

There were reported to the Fire Marshal Department for the year 1915 a total of 12,450 fires, as compared to 11,605 for 1914, an increase of 845. However, previous to 1915 only those fires were reported to the State Fire Marshal Department which caused a damage of five dollars (\$5.00) or over. There were 2,420 such fires reported during the year 1915, which increased the total number of fires reported that many. Deducting these 2,420 fires, which caused a damage each of less than five dollars (\$5.00), would leave 10,030 fires, each causing a damage of over five dollars, as compared to 11,605 for the year 1914, a decrease of 1,575 fires.

The total fire loss for the year 1915 amounts to \$11,798,569, as compared to \$15,353,847 for 1914, a decrease in the total fire loss for the entire State of Illinois of \$3,555,278.

The total fire loss for the year 1913 in those cities of Illinois of over 15,000 population amounted to \$8,566,582; and in those same cities the fire loss for 1914 amounted to \$6,885,621; and for 1915, \$5,721,660, a reduction of \$1,680,961 for 1914, and a further reduction of \$1,163,961 for 1915.

The total number of deaths caused directly by burns during the year 1915, reported to the State Fire Marshal Department, was 263, as compared to 287 for 1914, and 387 for 1913, a decrease of 24 for 1915, as compared to the previous year.

This decrease in the number of people burned to death, together with the marked decrease in the property loss for the year 1915, should be a matter of great encouragement to all those who are interested in fire protection and fire prevention in this State.

Chimneys, flues, etc., defective and overheated, were responsible for 1,119 fires in 1915, causing a total loss of \$887,975.

Petroleum and its products was the cause of 788 fires, and a property loss of \$502,928.

Incendiarism caused 448 fires, and a property loss of \$494,208.

Defective electric wiring caused 352 fires, and a property loss of \$448,774.

Sparks arising from combustion caused 1,354 fires, and a property loss of \$497,466.

Spontaneous combustion caused 353 fires, and a property loss of \$492,601.

Stoves, furnaces, etc., overheated and defective, caused 913 fires, and a property loss of \$484,811.

In 755 fires during the year 1915, the fire was not confined to the building in which it originated, and thus 755 exposure fires caused a loss of \$776,020.

In 102 of these exposure fires the original fire was caused by defective chimneys and flues, increasing the total fire loss from defective chimneys and flues \$65,962, or, in other words, \$65,962 of the exposure loss is directly chargeable to defective flues and chimneys, thus making the total loss from that cause \$953,937.

In 72 of the fires charged to exposure, the original fire was caused by petroleum and its products. These 72 fires caused an exposure loss of \$35,386, thus increasing the loss caused by petroleum and its products that amount, and making the total loss from this cause \$538,314.

In 55 of the exposure fires the original fire was caused by incendiarism. These 55 fires caused a total loss of \$34,629. This added to the loss directly chargeable to incendiarism increases the fire loss due to this cause to \$528,873.

In 92 of the fires charged to exposure the original fire was caused by defective electric wiring, increasing the fire loss from this cause \$31,584, and making the total fire loss from defective electric wiring \$480,358.

In 87 of the exposure fires the original fire was caused by sparks arising from combustion, increasing the total loss from this cause \$34,998, and making the total loss from sparks from combustion \$532,464.

Forty-eight of the exposure fires can be directly charged to spontaneous combustion, which was the cause of the original fire, increasing the loss from this cause \$34,610, and making the total loss from spontaneous combustion \$527,211.

For the purpose of comparison the following table, showing the fire losses for 1913, 1914 and 1915, in each of those cities of 15,000 or over population, is shown:

Cities.	1913.	1914.	1915.	Cities.	1913.	1914.	1915.
Chicago	\$5,600,000	\$4,567,495	\$3,246,020	Belleville	32,000	16,000	23,054
Peoria	407,987	356,657	270,312	Moline	35,000	23,658	15,237
East St. Louis ..	637,540	440,443	201,684	Rock Island ..	342,000	30,206	42,798
Springfield	276,136	108,359	388,328	Freeport	53,808	8,609	14,763
Rockford	59,464	17,784	26,938	Alton	67,000	59,285	57,140
Quincy	504,000	97,536	86,502	Waukegan	18,000	21,000	62,500
Joliet	11,557	23,902	254,134	Champaign	47,338	31,395	356,292
Aurora	51,973	30,306	97,416	Jacksonville ...	50,000	67,641	20,418
Decatur	65,000	626,129	164,010	Chicago Hts. ..	26,200	17,450	23,460
Danville	82,000	79,879	213,494	Streator	19,621	14,778	18,400
Evanston	24,000	68,751	26,786	Kankakee	10,490	6,745	23,804
Bloomington ...	26,177	19,056	17,259				
Oak Park	31,041	64,390	21,973	Total	\$8,566,582	\$6,885,621	\$5,721,660
Galesburg	43,250	64,067	39,471	Decrease for 1914.....			\$1,680,961
Elgin	45,000	24,100	9,567	Decrease for 1915.....			1,163,961

PART I.

DEPARTMENT OF EDUCATION.

“There are three methods of learning Wisdom:
First, by Reflection, which is noblest;
Second, by Imitation, which is unworthy;
And third, by Experience, which is bitterest.”

DEPARTMENT OF EDUCATION.

The Department of Education has continued the publicity plan which was adopted early in the year 1914.

It is difficult for the people of the State to realize the fact that even though property which has been destroyed by fire was insured, and the owner receive some money consideration therefor, this in no way changes the condition that a property asset has been forever destroyed.

The fact that a man receives insurance money for loss occasioned by fire is simply and solely the process of taking the money out of the pockets of the citizens of the State and turning it over to him as their contribution made by the members of a mutual organization as a relief from temporary misfortune.

INSURANCE A TAX.

Insurance is a tax levied upon the many for the benefit of the few. Instead, however, of being a tax for the public benefit, or a public improvement, it is a tax wasted by reason of the carelessness and negligence of the people.

A large proportion of the fire waste, both of property and lives, in this State, is caused by the negligence and carelessness of the people.

In order to bring this fact directly home to our citizens, the Fire Marshal Department, during the year 1915, issued and distributed 20 general bulletins, each dealing with some particular phase of the fire-prevention movement. It is impossible to estimate the great good accomplished for fire prevention by these bulletins. They were quite generally printed by the newspapers of Illinois, and even though the direct results obtained can not be measured, yet we feel sure that much good has been done the fire-prevention movement through them.

ORDINANCES.

This department has prepared and distributed on request to various cities and towns, a set of model fire prevention ordinances. Efforts have been made to get the cities and towns in Illinois to adopt and enforce these ordinances which relate to the use and storage of explosives, inspection of buildings by fire departments, regulating automobile garages, storage and sale of gasoline, prohibiting the discharge or firing of fireworks, and prohibiting the sale of fireworks at retail, providing for fire escapes, providing for the office of electrical inspector, and regulating the accumulation of trash and rubbish. A great many cities in the State have adopted the ordinance providing for the inspection of buildings and premises by members of the fire department. Special attention has been paid by the authorities of the

various cities along the line of proper storage of gasoline and many ordinances regulating the traffic in this combustible and explosive fluid have been adopted and enforced. Much attention has also been paid to the matter of providing adequate fire escapes.

PROTECTION AGAINST LIGHTNING.

A 16-page booklet entitled "Suggestions for Protection Against Lightning," was printed and distributed quite generally over the State, and we believe that this little book has been instrumental in educating the public at large to the dangers from lightning and the protection afforded by properly installed lightning rods. The lightning losses in Illinois for the year 1913 amounted to \$1,104,693. In 1914 the lightning loss was \$1,035,936, and in 1915 the losses from this cause amounted to only \$395,634.

Thousands of buildings have been equipped with lightning rods in the State of Illinois during the past two years, and we believe that this is responsible for the great reduction in lightning losses for the past year.

TEACHING OF FIRE PREVENTION IN SCHOOLS.

All educational work, to be really effective, must of necessity have its origin in the public schools, and, realizing this fact we have carried the doctrine of fire prevention direct to the schools of the State. Even though Illinois, unlike many states, has no law making the study of this subject compulsory, yet we have received the heartiest cooperation along this line from practically all those who are identified with the public schools of this State.

FIRE PREVENTION SCHOOL READER.

A 96-page textbook, dealing with fires and fire prevention topics has been issued and distributed to the teachers of this State. Through the cooperation of the State Superintendent of Public Instruction, the county superintendents and the superintendents of the city schools, 30,000 of these books have been placed directly in the hands of the teachers of this State. This book contains 15 special fire prevention lessons dealing with such subjects as matches, hand fire extinguishers, first aid to the burned, spontaneous combustion, lightning fires, etc. It contains a suggested program and selections to assist in the proper observance of Fire Prevention Day; has a great deal of material that can be used advantageously to furnish supplementary reading for the pupils. It also contains a number of articles which can be used to furnish material and inspiration for essays on the subjects of fires and fire prevention.

The study of fire prevention in the schools has been commented upon and endorsed by practically all of the leading newspapers of Illinois, and in speaking editorially of this Fire Prevention School Reader, the Chicago American of November 4, 1915, says:

"Clearly a kind of calamity that amounts to a custom invites study as a preparation for improvement, and just as clearly there could be no way of propagating correct ideas concerning fire prevention than by taking it into the schools and making it an item in general education.

"This would be a branch of study eventually mastered by even quite small children, and it might on occasion lead to the exercise of an expert knowledge that would save lives or even prevent the destruction of a whole city. One point could be quickly taught. Even little boys and girls could be speedily qualified to recognize a fire trap when they saw it. Such a fire trap as the St. Johns School at Peabody for instance. Apparently, an almost studious negligence had prepared that building for the tragic holocaust that occurred a few days ago. The inside of the building was of wood, and highly inflammable. The doors opened inward, inviting the inevitable jam when a rush to get out occurred, and the structure was without fire escapes. Thus even small children could be quickly taught to recognize and appreciate the dangers of that kind of a building. Without having seen the book we easily perceive that the State Fire Marshal of Illinois has in some manner fallen upon a big idea, the idea of introducing the subject of fire prevention into the public schools as a part of general education."

The department has received many complimentary letters from educational sources relative to the adoption of this reader, and the necessity for some education along this line, among which are the following:

Mr. D. Walter Potts, Superintendent of Schools of East St. Louis: "I am delighted with the Fire Prevention School Reader. In all of our schools, in addition to the basic readers, we have several sets of supplementary readers. I know of nothing better in the way of supplementary reading than this Fire Prevention School Reader. If you will send the number of copies as per enclosed schedule, I assure you that the principals, teachers and pupils of this city will feel under obligations to your office for the service rendered."

Mr. Robert R. Randolph, County Superintendent of Schools of Pope County, Golconda, Illinois: "I can make use of 100 copies or more of your Fire Prevention School Reader in Pope County. I have carefully read the copy sent and think it worthy of a place in every grade in Illinois."

Mr. J. W. Becker, County Superintendent of Schools of Jersey County, Jerseyville, Illinois: "I have your letter and sample copy of the Fire Prevention School Reader. I consider it an excellent publication. It will afford me great pleasure to deliver one to each of my 106 teachers, with instructions to use the same in their schools."

Mr. Cyrus S. Grove, County Superintendent of Schools of Stephenson County, Freeport, Illinois: "Fire Prevention School Reader received. It is a gem. Please send me 160 copies for real use."

Mr. Otto F. Aken, County Superintendent of Schools of Jackson County, Murphysboro, Illinois: "I have 229 teachers teaching in this county and will deliver a copy of your Fire Prevention School Reader to each of them, with instructions that they make use of it in their schools. I find some excellent helps and suggestions in it and desire to thank you for the opportunity to cooperate with you in fire prevention."

Mr. B. C. Moore, County Superintendent of McLean County, Bloomington, Illinois: "Please send me 400 copies. We shall certainly make good use of them. I think it is fine."

SCHOOL MEETINGS.

In carrying the campaign of education into the schools of Illinois many addresses and talks on this subject have been made to the children by members of the State Fire Marshal Department. In these addresses the children are shown the special dangers of certain fire hazards, and the inevitable results which follow carelessness and neglect along this line. They are given instruction enabling them to see and recognize and remedy hazardous conditions which might, if allowed to continue, result disastrously. In many cities and towns inspection blanks have been furnished school pupils and these they have taken into their homes and filled out, after a careful inspection of the premises. We feel that many serious defects have been remedied by the cooperation given us by the teachers and pupils of the schools.

Realizing the fact that things seen are more easily grasped and learned than things heard, the department has purchased a motion picture machine for special use in schools of the State. We have also provided ourselves with a two-reel, noninflammable film, entitled "The Lesson of the Flames." This film teaches the result of carelessness on the part of a factory owner in a very striking manner. We have also provided a great many picture slides, showing proper and improper construction of fire escapes, fire departments in operation, safe and faulty building construction, and countless other subjects which are of special interest to the public at large and particularly to the pupils of the schools.

SPECIAL PICTURE SLIDES.

Through the courtesy of Henry Evans, president, and C. R. Tuttle, secretary of the Continental Insurance Company of New York, we have been furnished with 20 exceptionally beautiful slides, which illustrate some stirring events in American history, including such events as the Capture of Fort Ticonderoga, Sergeant Jasper at Fort Moultrie, the Making of the First American Flag by Betsy Ross, the Capture of Kaskaskia by George Rogers Clark, etc., etc. These slides were made by one of the best artists in the city of Chicago from original paintings and the exact coloring of the paintings is reproduced in the slides.

WE ARE NOW PREPARED TO FURNISH TO ANY SCHOOL IN THE STATE A 25-MINUTE LECTURE ON AMERICAN PATRIOTISM, AND A 15-MINUTE LECTURE ON FIRES AND FIRE LOSSES IN ILLINOIS, BOTH LECTURES ILLUSTRATED BY APPROPRIATE AND BEAUTIFUL LANTERN SLIDES.

FIRE PREVENTION MEETINGS.

In a great many cities of the State public fire prevention meetings have been held, usually under control of the Business Men's Association, or the city authorities of the city, at which either the State Fire Marshal or some representative of the department has discussed the subject of fire prevention to interested citizens. By this means the doctrine of fire prevention has been carried personally to a large number of people. Addresses have also been made to members of

Farmers' Mutual Insurance Companies at their annual conventions, before Commercial Men's Clubs, Farmers' Institutes, Women's Clubs, etc. We have also followed the plan of having a general inspection of two Illinois cities each month. Following this inspection a public meeting has been held, at which the State Fire Marshal has addressed the citizens at large on the subject of fire prevention and the work of the Fire Marshal Department. The motion picture film "The Lesson of the Flames," and the lantern slides have been used to bring out the educational features of this address.

A few of the bulletins issued during the year 1915 are here reproduced in order to show the general character of the work along this line.

GENERAL BULLETIN NO. 12—1915.

KEROSENE OIL LAMPS.

Kerosene oil, although electricity and gas has superseded it to a great extent, is still quite generally used throughout all the cities and towns of our country as a means of producing light. The careless use of the kerosene oil lamps causes more than 200 fires each year in the State of Illinois, and the destruction of a great amount of valuable property and the loss of many lives.

Kerosene is such a thin oil that it is quickly drawn to the top of a lamp wick, and there it waits until the match flame touches it. The oil is made up of atoms of carbon and hydrogen, loosely combined or joined together. These atoms of carbon and hydrogen have a great affinity for the oxygen of the air. Before the flames loosen the atoms they could not join themselves to the oxygen, but when they are freed, each of the greedy little atoms of carbon seizes two atoms of oxygen and forms what is called carbonic acid gas, or C.O_2 . Each pair of hydrogen atoms takes one atom of oxygen and forms water, or H_2O . These two gases, both the carbonic acid gas and the water in the form of vapor, are carried out of the top of the lamp chimney.

The lamp chimney makes the air that arises through it pass very close to the flame of the wick so that the carbon and hydrogen, waiting in the wick in the form of oil, can take the oxygen from the air. While this carbon is burning it becomes white hot and that makes the light.

Sometimes kerosene oil lamps explode, and the flaming oil will be thrown over all who are near it. The brass in the burner frequently becomes so warm that it heats the glass in the lamp and heats the oil, and the kerosene gives off a kind of vapor which is very explosive. If the wick does not fit closely in the tube the flames will frequently flash down to this vapor in the lamp and the lamp will explode if the vapor can get out through a hole in the collar of the lamp and reach the flames. See to it that the wick fits the tube closely; that the collars and burners of your lamps are kept clean, so that the heat will pass off. It is only old and dirty burners that cause these explosions.

If you have been burning a lamp and it needs to be refilled, do not take off the burner near a light or a fire. The vapor in the bowl

of the lamp may be lighted and cause a serious explosion. Never fill a lamp while it is lighted.

Many people make a practice of burning kerosene lamps all night. This is a bad practice. First, because a great deal of the oxygen in the air is consumed by the lamp. Oxygen is the very life of the air. We all need oxygen to keep us alive, and that is why we should have plenty of clean, pure air to breathe. We can not have pure air in a room in which a kerosene lamp is burning. The second reason why it is bad practice to burn a lamp all night is because of the fact that it is especially liable to explode and cause a serious fire.

The oil in the lamp burns low and this leaves more space above it for the explosive gas and increases the liability of an explosion.

GENERAL BULLETIN NO. 17—1915.

FIRES IN THE HOME.

There were 11,605 fires in the State of Illinois during the year 1914, each of which caused a damage of at least \$5, and the total property loss caused by these fires amounts to the enormous sum of \$15,353,847.

Of this great number of fires nearly 50 per cent, or to be exact, 5,733, of them were dwelling house fires, and a large proportion of them could have been prevented had a little time and attention been given by the owner or occupant thereof to the fire hazard.

Two hundred eighty-seven people were burned to death in Illinois last year and a large per cent of these accidents was due to carelessness.

The careless use of matches, starting fires with kerosene, explosions of kerosene lamps, and clothing ignited by stoves and grates caused at least one-half of the entire number of deaths by fire.

KEROSENE AND GASOLINE caused 696 fires in Illinois last year and a property loss of \$1,216,506. Kerosene oil lamps are especially dangerous, and when a lamp is only partially filled and the burner is clogged with dirt and soot, it becomes a death dealing demon of destruction. Gasoline is especially dangerous in the home and should be handled therein with the utmost caution. A small quantity of gasoline if left in a closed room will impregnate the air until it becomes highly explosive. Always store gasoline outside the dwelling and do your cleaning with it in the open air so the fumes may entirely evaporate before the garments are returned to the house.

Inspect your chimneys and flues. Defective flues caused 1,066 fires last year and a property loss of \$822,510. Such fires are always the result of carelessness and are easily preventable.

SPARKS ON ROOFS caused 1,145 fires which destroyed property to the value of \$643,841. It will be hard to eliminate fires of this character until such time as the people can be brought to realize that the shingle roof is a fire menace.

Spontaneous combustion was responsible for 255 fires and a fire loss of \$550,582. Great danger lurks in the oily mops and rags

which have been used for polishing the floors or furniture. These should be either burned after using or kept in substantial metal receptacles, since they are especially liable to spontaneous combustion. Keep your cellars and attics free from rubbish and accumulations of any kind, since most spontaneous combustion fires start in either the attic or basement.

The careless use of matches caused 821 fires and a property loss of \$360,645, and was responsible for the deaths of 34 persons in Illinois last year. Keep matches in metal boxes, away from children, and teach the little ones that they must not play with them.

Defective stoves and furnaces caused 774 fires in Illinois last year which destroyed property to the value of \$701,222. A little care and attention on the part of the property owner would eliminate practically all of these fires, which are usually caused by lack of ordinary precaution.

If the householder will pay some little attention to the ordinary fire hazards mentioned above, much of the great fire waste in this State will be eliminated.

GENERAL BULLETIN NO. 19—1915.

INDIVIDUAL LIABILITY FOR FIRES—WARNING TO PROPERTY OWNERS.

PROPERTY OWNERS LIABLE FOR DAMAGES CAUSED BY FIRE DUE TO CARELESSNESS OR NEGLECT.

Has the owner of adjoining property, which is damaged by fire communicated to it from another building, and which was caused by the neglect, carelessness or noncompliance of the owner thereof, with existing laws and ordinances, a right of action at common law, in the State of Illinois?

We believe that he has because of the following cases:

THE COST OF EXTINGUISHING THE FIRE CHARGED TO THE PROPERTY OWNER.

The Supreme Court of New York has held that where a motion picture film company stored films in a building without a permit as required by city ordinance, it was liable to pay the fire department the full cost of extinguishing the fire.

This suit followed a decision of the Appellate Court in which it was decreed that the Greenwood Cemetery Company should pay \$1,500 to cover the cost of putting out a fire on its premises, and which was caused by its failure to install automatic sprinklers as ordered.

FAILURE OF OWNER TO COMPLY WITH THE LAW MAKES HIM RESPONSIBLE FOR DAMAGES.

Apart from the question of statutory liability, it was contended in the above cases that the defendant was liable for the damages caused by its negligence. The negligence was pleaded as a matter of fact and it was held that the defendant's failure to comply with the lawful

requirements, was negligence as a matter of law. Its negligent act caused the fire and resulted in the damage for which recovery was sought.

THE SITUATION IN ILLINOIS.

In Illinois our Supreme Court has held in the case of *Nall v. Taylor*, that a person is liable for all of those consequences which might have been foreseen and expected as a result of his conduct. In this case the defendant, Taylor, set out a fire for the purpose of burning a lot of dry grass and weeds on his farm. The fire got away from him and set fire to his house and barn. The burning of his house and barn, because of a high wind, resulted in setting fire to and burning the house and barn of the plaintiff, Nall, nearly a quarter of a mile away. The Court held that setting out the fire by Taylor was the proximate cause of the burning of the buildings of Nall; and that Taylor must pay the damages thus caused by such communicated fire.

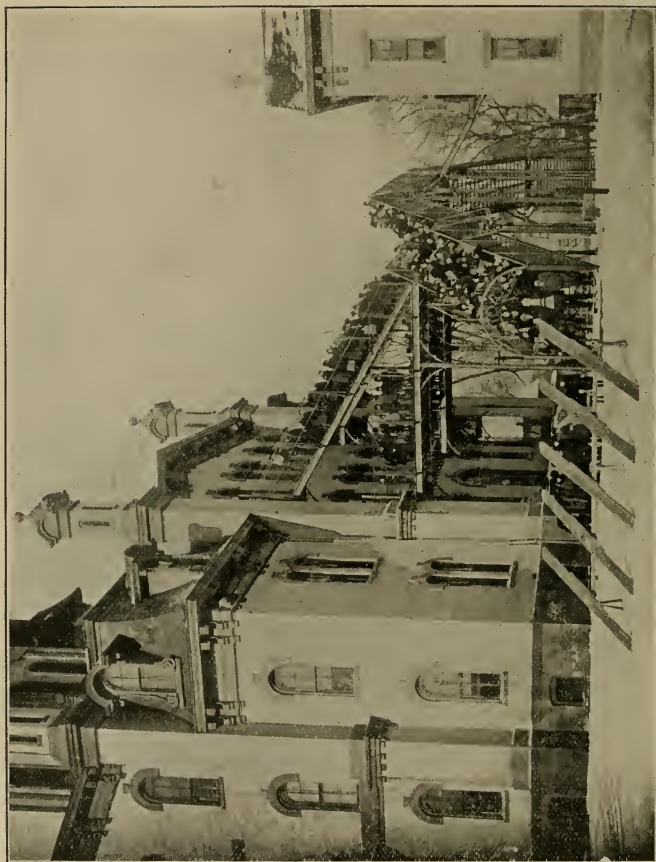
In another case the Illinois Supreme Court holds that where a railroad company set fire to the grass along its right of way, and a person attempting to put out such fire, was burned to death by her clothing catching fire, the railroad company is liable in damages therefor; and again where the fire department was hindered from arriving at a fire in time to put it out, the person so hindering the department must pay the damages thereby occasioned.

FAILURE TO MAINTAIN PROPER FIRE ESCAPES.

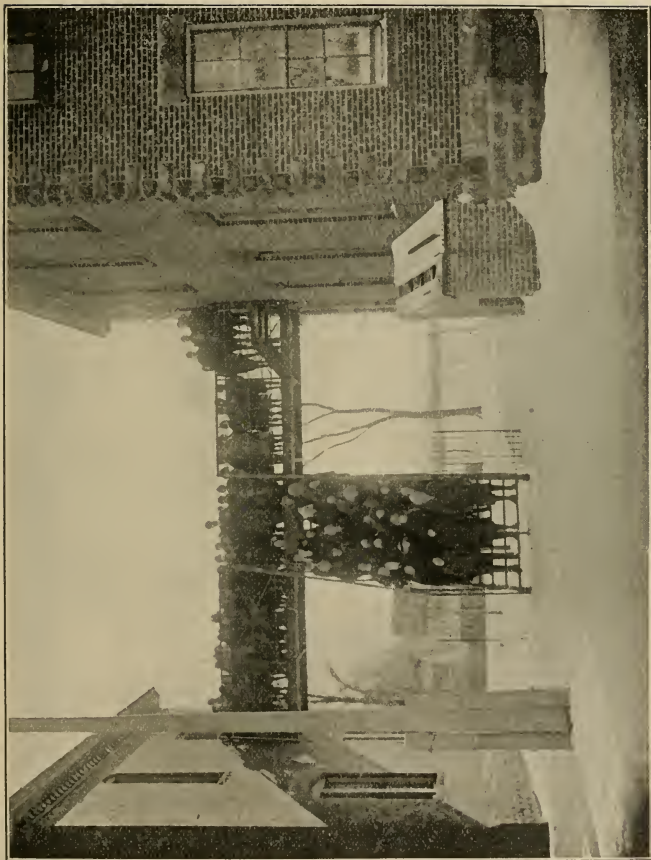
The Supreme Court of Indiana in 1913 in the case of *Stiert v. Coulter*, held that where a statute required the owner, occupant or lessee to erect certain fire escapes, the owner was primarily liable and responsible for failure to provide such fire escapes, and a person injured by reason thereof has a right of recovery; and in some cases this right might be enforced against a tenant or lessee.

A decision was recently handed down by the Minnesota Supreme Court at Minneapolis, awarding damages for injuries sustained in a fire. Mrs. M. E. Wardwell, of Minneapolis, and Marjorie McCall, of St. Paul, were the plaintiffs. They sued Hannah Cameron, owner of the Concor Flats in St. Paul, which were destroyed by fire, and in which four women lost their lives in 1910. Suits were based on the allegation that the fire escapes were insufficient. Mrs. Wardwell received judgment for \$2,713. She went down a fire escape until she was compelled to jump 20 feet. Her leg was broken. Marjorie McCall, an administratrix for Jeanette Wilford, a little girl who was burned to death, also received judgment for \$1,000.

The Missouri Supreme Court on January 5, 1915, upheld the State Law which requires the construction of fire escapes upon all hotels or rooming houses three or more stories in height. This opinion was rendered by Judge Faris, in the case of Alice, Vernie and Daisy Burt, against A. P. Nicholls for damages for the loss of their mother who was burned to death in a Kansas City three-story building, owned by Nicholls, and which was not equipped with fire escapes, as provided by law.



PLATFORM FIRE ESCAPE, CENTRAL SCHOOL BUILDING, STERLING, ILLINOIS.



FIRE ESCAPE ON GRADE SCHOOLS, ROCK FALLS, ILLINOIS.

GENERAL BULLETIN NO. 20—1915.

HAND FIRE EXTINGUISHERS.

There is a fire prevention device which should be provided for every school, home, and public building. This is the hand fire extinguisher. The two types of extinguisher which are most frequently used for such buildings, and which are especially endorsed by the State Fire Marshal Department for taking care of incipient fires, are the $2\frac{1}{2}$ gallon bicarbonate of soda tip-over extinguisher, and the pump type extinguisher of one quart capacity, such as the Pyrene.



The loose stopple type of hand chemical extinguisher is made of copper, cylindrical in shape, provided with hose and nozzle without shut-off and has a liquid capacity of about $2\frac{1}{2}$ gallons. In this extinguisher are placed $2\frac{1}{2}$ gallons of water, $1\frac{1}{2}$ pounds of common baking soda, and in the top of the extinguisher is placed a small vial of sulphuric acid with a loose stopple. All that is necessary to operate this type of extinguisher is to invert it. This causes the stopple to fall from the neck of the bottle of sulphuric acid and the acid mixing with the bicarbonate of soda solution causes a formation of carbonic acid gas. This gas creates sufficient pressure to force the water through the nozzle a distance of a number of feet, and after the water has all been forced out, quantities of the carbonic acid gas are also forced through the nozzle to the vicinity of the fire. This gas is a nonsupporter of combustion, and aids materially in extinguishing the fire which has been

partially cooled by the discharge of water. These extinguishers, however, are not recommended for electric arcs or electric wiring of high voltage, nor are they of especial value in the control of burning oils and chemicals.

The one quart hand extinguisher, of which the Pyrene extinguisher is a prominent example, is filled with a liquid which, on being exposed to heat of 200 degrees, generates a gas which is a non-supporter of combustion. As a result thereof, with no oxygen in the vicinity of the fire to support it, the fire is immediately extinguished because of lack of oxygen on which to feed. These extinguishers are effective for all small fires and are especially recommended for hazardous liquids, calcium carbide, and rapidly burning materials such as celluloid and are efficient in practically all other fires which are not easily extinguished by water. They are especially recommended for garages, automobiles and motor boat use and for electric arcs. Because of the low freezing point of the extinguishing liquids with which these extinguishers are filled, they are adapted for service where low temperature prevails. They are also easily handled by women and children.



All extinguishers bearing the label of the Underwriters Laboratories are approved and recommended by the State Fire Marshal Department.

Experiment: That carbonic acid gas is a nonsupporter of combustion can easily be proven in the following manner: Place two or three tablespoonfuls of bicarbonate of soda in a common fruit jar. Pour over it about one-half cupful of common vinegar. You can see bubbles of gas which are being formed in the bottom of the jar, and this gas is carbonic acid gas. If a lighted taper or stick is lowered into the jar it is immediately extinguished because there is no oxygen in the jar to support the combustion. This carbonic acid gas is heavier than air, consequently it can be poured from one jar into another.

VALVOLINE OIL COMPANY FIRE, ROCHELLE, ILLINOIS.

The Valvoline Oil plant at Rochelle, Illinois, consisted of two nine-thousand (9,000) gallon expanded metal tanks. Connected with these tanks, as the pictures show, is a small building, which is used as an office and wagon shed, located some 30 feet from the tanks proper. Between this office and wagon shed and the tanks is the pumphouse. The gasoline was pumped from the tank cars into these expanded metal tanks by means of an electric motor-driven pump. To reduce the hazard of fire, the switchbox used to operate this electric motor was placed in the office or wagonshed some 15 feet from the motor.

Mr. W. L. Raker, who was in charge of the plant, had emptied the tank car into the tanks, had filled up a wagon load of gasoline cans, filled, of the five and ten-gallon variety, which had been hauled into the shed. This completed, he went into the office and opened the switch to stop the pump. In transferring this gasoline he had become more or less saturated with the fluid. He had on a pair of cotton gloves, and the arc produced by breaking the switch contact by opening the switch, ignited the vapor, set him afire and followed the vapor on the floor. There was a bright flash, and in 15 minutes time, the entire wagon, its contents, and this shed were consumed.

Mr. Raker, by a miraculous act of Providence, succeeded in getting off his burning clothing and escaped without any serious injury.

STRANGE AND UNUSUAL FIRES.

Many Peculiar Fires Reported to the Illinois Fire Marshal.

GASOLINE CAUSES MANY PECULIAR FIRES.

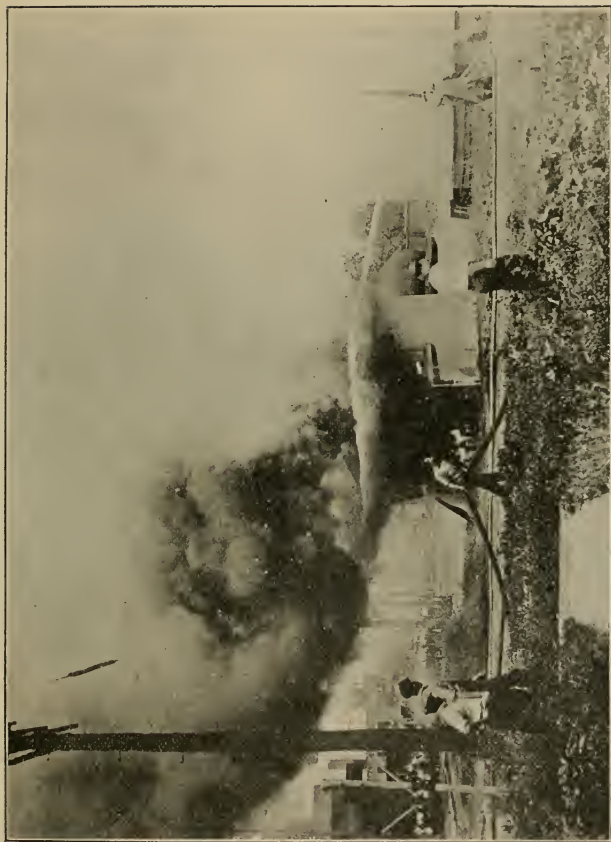
At Galesburg, Illinois, a lady having occasion to wash a silk dress in gasoline, took it in her hands after it was partially dry and brushed it vigorously to smooth out some wrinkles. A spark of static electricity was developed, which ignited the gasoline fumes, destroyed the dress and painfully burned the lady's hands.

AUTOMOBILE OWNER HAS QUEER FIRE.

In the northern part of the State an automobile owner was filling the tank of his automobile from a five-gallon can of gasoline, pouring



VALVOLINE OIL PLANT FIRE, ROCHELLE, ILLINOIS.



ANOTHER VIEW OF VALVOLINE OIL PLANT FIRE.

the fluid through a chamois used as a strainer. The can and contents became charged with static electricity and on touching the mouth of the can to the edge of the funnel a spark ignited the gasoline causing quite a serious blaze.

GASOLINE BLAZE IN HOTEL.

A hotel owner in Springfield, Illinois, thinking to economize on his dry cleaning bills attempted to clean some silk curtains in one of the rooms of the hotel. Two girls, employees of the establishment, put five gallons of gasoline in a common metal washtub and began the operation of cleaning the curtains. While raising the heavy curtains in the tub a spark of static electricity ignited the gasoline fumes and both girls were seriously burned.

FRICITION ON FUR IS THE CAUSE OF FIRE IN TAILOR SHOP.

A dry cleaner in Kewanee, Illinois, had occasion to clean a marabou fur neckpiece in his establishment. While engaged in briskly rubbing it, a spark of electricity was developed which ignited the small quantity of gasoline, which was used; and in an instant the room was in a blaze. The fire department responded to the alarm and extinguished the fire by using the chemical extinguisher.

STOVE POLISH EXPLOSION.

A lady at Peoria, Illinois, attempted to use a patent stovepolish on a warm stove. Explosion of the polish interrupted the process. The lady was not seriously injured and the damage was slight.

However, two women were burned to death in the State of Illinois from just such accidents during the year 1915.

GOLDFISH AQUARIUM CAUSES FIRE.

In Chicago, Illinois, a small urn used as an aquarium for holding goldfish was placed on a stand directly in front of a window. The sunlight, entering through the window, struck this urn in such a way that the rays were converged on the edge of a linen table cloth on a nearby stand. The cloth was ignited from the heat developed. No serious damage.

SPONTANEOUS COMBUSTION FIRE.

An employee of a Chicago garage rolled up his oil-soaked overalls and threw them into a wicker basket used for soiled clothes. The basket was sitting near the steam pipe. Spontaneous combustion was developed and the basket of clothes destroyed.

HARMLESS (?) SPARKLERS A DANGEROUS PLAYTHING.

A little girl at Oak Park, Illinois, received serious burns while playing with a box of Christmas "sparklers," the kind that sputter and throw off myraids of "harmless" sparks when lit. It is evident that the stick itself, which becomes red-hot, came in contact with the little girl's dress and caused it to ignite. The little child was seriously burned and the mother, who extinguished the blaze by rolling the little girl in the snow, was also slightly injured.

CELLULOID COMB EXPLODES.

A lady in central Illinois was injured in a peculiar accident on Christmas day. A celluloid comb was worn in her hair and in working near a heating stove, the heat ignited the comb and practically all her hair was burned from her head.

Two people were burned to death by fire which was caused by celluloid combs and ornaments.

SAFE STORAGE OF GASOLINE.

[By PETER JACOBS, Chief of Fire Department, Springfield, Illinois.]

Four times as much gasoline is now used in the State of Illinois as was used five years ago, and with this steadily increasing use of gasoline in motor vehicles and stationary engines and heating and lighting plants, the question of the proper storage of it must be taken up in an intelligent way by the State Fire Marshal Department and the fire chiefs of Illinois.

Gasoline is a distilled product of crude petroleum oil. It is the most volatile of all petroleum products, and is a most dangerous fluid because of the readiness with which it vaporizes. Gasoline vapor when mixed with air forms a highly explosive compound, and it should always be handled with the utmost care and caution.

In some cities and towns it is a common thing to find every garage, hardware store, grocery, and occasionally drug stores, storing gasoline in light cans, or open tanks for selling purposes. Such a condition breeds numberless fires, causes the spreading of many fires when once started, makes firemen subject themselves to extreme danger when fighting fires, and is a serious menace to the lives and property of the people of this State.



PETER JACOBS,
Chief of Fire Department,
Springfield, Illinois.

The only safe, sane and economic manner in which gasoline can be stored is in properly installed underground tanks. Underground storage confines the explosive vapor given off, and thus reduces the chance of accidental ignition to the minimum.

Gasoline fumes are more explosive than gunpowder and are so easily ignited that a small amount of heat or the faintest spark of electricity will ignite them and frequently cause a serious explosion and fire. In the city of Springfield peremptory orders have been issued to

all handlers of gasoline to at once install approved underground storage tanks. This I regard as the only solution of the gasoline storage problem.

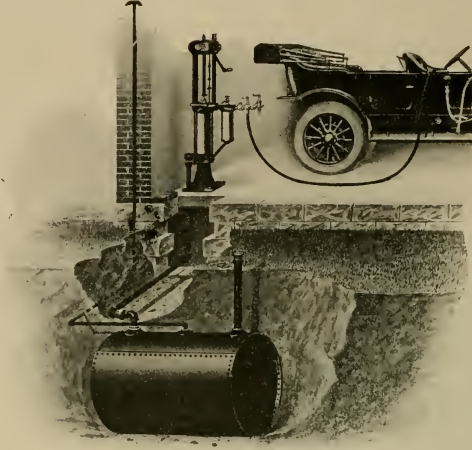
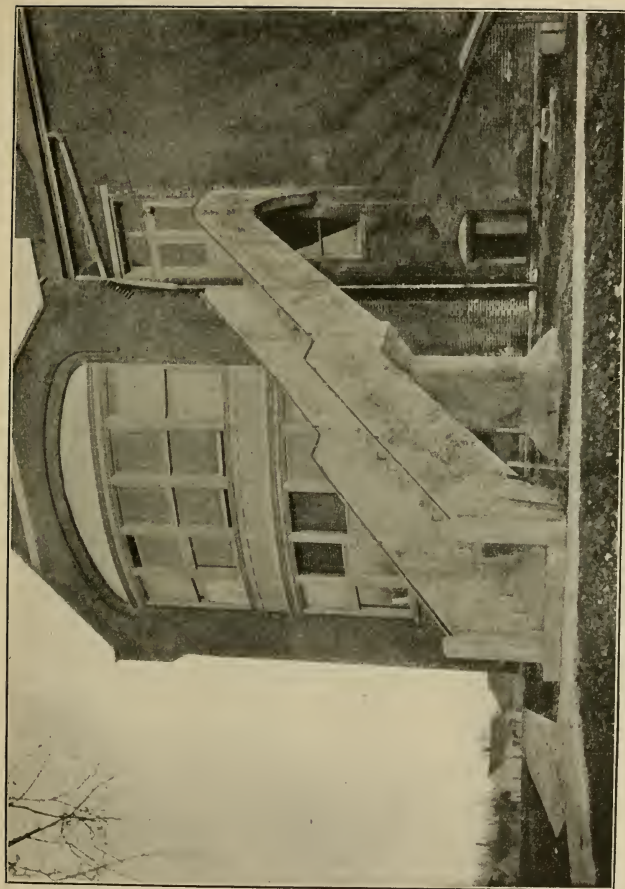


ILLUSTRATION SHOWS PROPER METHOD OF INSTALLING UNDERGROUND STORAGE TANK IN GARAGE.



ILLUSTRATION SHOWS APPROVED UNDERGROUND STORAGE TANK PROPERLY INSTALLED.



CONCRETE FIRE ESCAPE ON GRADE SCHOOL, MARION, ILLINOIS.

CHEMICAL FIRE EXTINGUISHERS.

[THOMAS N. WORM, Chief of the Fire Department, Peoria, Illinois.]

During my long experience in connection with the fire department of this city, it has been demonstrated to me that chemical extinguishers are very efficient in checking certain kinds of fires, namely: acid, chemical and oil fires of all kinds.

I have also found them efficient in protecting property adjacent to large fires where we have to deal with the problem of fire being communicated by sparks. Chemicals are efficient in checking inside fires in dwellings, but I fear that in using soda acid extinguishers in dwelling fires there is one particular drawback, that is that all carpets, tapestries and soft fabrics are easily stained by the fluid and this stain you will find almost impossible to remove.

For some time each apparatus in our department has been equipped with 1-inch hose which we attach to the $2\frac{1}{2}$ -inch hose and by using a $2\frac{1}{2}$ -inch reducer and a nozzle with stopcock we have been able to do very effective work. This combination is always ready for use, eliminates the charging and recharging of chemicals and can be used in dwelling fires without staining



CHIEF T. N. WORM.

any of the property. This combination, of course, can only be used where there is a generous and handy water supply.

In all communities handicapped by a lack of water facilities the chemical apparatus can be used to a good advantage.



FOR THE PROTECTION OF THE CHILDREN.

PART II.

DEPARTMENT OF INSPECTION.

If fire breaks out, and catch in thorns, so that the stacks of corn, or the standing corn, or the field be consumed therewith; he that kindleth the fire shall surely make restitution.—*Exodus xxii, 6.*

DEPARTMENT OF INSPECTION.

The work of the State Fire Marshal Department has grown very rapidly in the few years of its existence, and no part of the work has increased more rapidly than that which has to do with the inspection of hazardous buildings and conditions therein.

The enforcement of the provisions of the Fire Marshal Act requiring safe conditions as to fire hazard where either life or property is placed in jeopardy, has proven of great value to the people of the State, and its application has been received with hearty approval by the general public.

Increasing demands are being made on the department for the inspection of public halls, picture theaters, schools, churches and other places where a large number of people assemble.

Recognizing the great importance of regular and systematic inspections in the work of fire prevention and fire protection, the State Fire Marshal has found it advisable to place the division of inspection directly in charge of First Deputy W. S. Hoopes, with Mr. S. Legreid, of Centralia, as assistant, with the title of supervisor of inspections.

The State has been divided into twelve districts, a definite number of counties being allotted to each district. A deputy State fire marshal, as special inspector, has been placed in charge of each inspection district, and all the inspections in those counties embracing his district are under the personal supervision and charge of this deputy.

Inspections in the city of Chicago are under the supervision of Chief Deputy A. A. Bach, who has charge of the Chicago office of the State Fire Marshal which is located in the State building.

District No. 1, M. J. Durr, Chicago, in charge: Counties of Lake, Dupage, and all of Cook outside the city of Chicago.

District No. 2, east half, T. A. Greely, Chicago, in charge: Counties of Winnebago, Boone, McHenry, DeKalb and Kane.

District No. 2, west half, Robert Harper, Rock Falls, in charge: Counties of Stephenson, Carroll, Ogle, Whiteside, Lee and Jo Daviess.

District No. 3, Wm. L. Berger, Geneseo, in charge: Counties of Rock Island, Henry, Mercer, Henderson, Warren, Knox and Fulton.

District No. 4, L. C. McMurtrie, Lacon, in charge: Counties of Bureau, La Salle, Kendall, Grundy, Putnam, Stark and Marshall.

District No. 5, Edward Holland, Bloomington, in charge: Counties of Will, Kankakee, Iroquois, Ford, Livingston and McLean.

District No. 6, William F. Ryan, Peoria, in charge: Counties of Peoria, Woodford and Tazewell.

District No. 7, M. E. Norton, Galesburg, in charge: Counties of Hancock, McDonough, Adams, Schuyler, Brown and Pike.

District No. 8, J. E. Gallivan, Champaign, in charge: Counties of Dewitt, Logan, Mason, Cass, Menard, Macon, Piatt, Sangamon, Morgan, Christian, Scott, Greene, Jersey, Macoupin, Montgomery, Shelby and Moultrie.

District No. 9, Charles J. Roberts, Champaign, in charge: Counties of Champaign, Vermilion, Douglas, Coles, Edgar, Clark and Cumberland.

District No. 10, S. Legreid, Centralia, in charge: Counties of Fayette, Effingham, Jasper, Crawford, Lawrence, Richland, Clay, Marion, Jefferson, Wayne, Edwards and Wabash.

District No. 11, Tony Brucks, East St. Louis, in charge: Counties of Madison, Bond, Clinton, St. Clair, Monroe and Washington.

District No. 12, J. Q. Snedeker, Marion, in charge: Counties of Perry, Franklin, Randolph, Hamilton, White, Gallatin, Saline, Williamson, Jackson, Union, Johnson, Pope, Hardin, Massac, Pulaski and Alexander.

Since its organization the State Fire Marshal Department has cooperated with the Illinois State Fire Prevention Association in holding two general inspections each month in the larger cities of the State. This branch of the work has now developed to such proportions that it has been found advisable for the State Fire Marshal to take full charge of such meetings and inspections.

At these general inspections a number of deputy fire marshals go carefully over fire hazard in the city in which the inspection is being held, and where conditions are found dangerous and liable to cause fire, orders are issued for their removal.

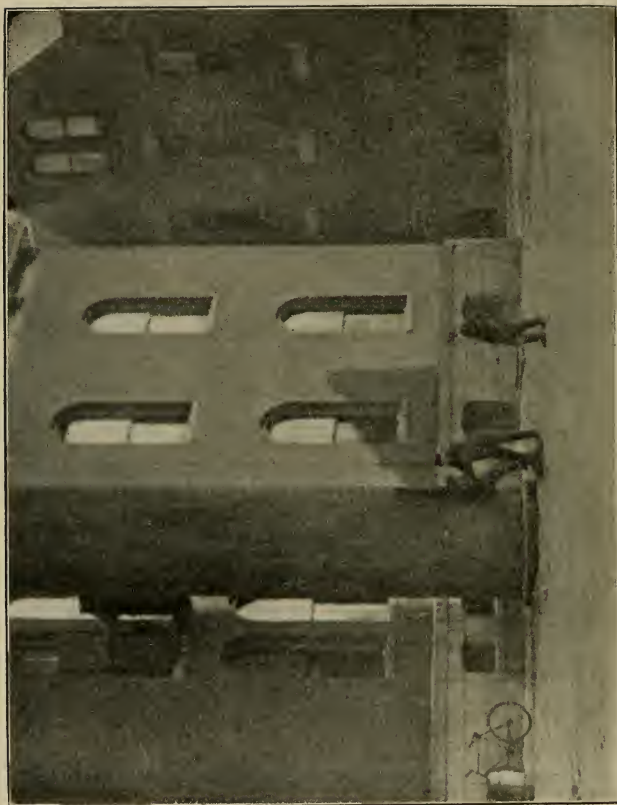
The State Fire Marshal or some member of the department makes a short talk on fire prevention to the pupils of the school, outlining to them the dangers of fire and the inevitable results of carelessness, and instructing them in the simpler methods of fire prevention.

Following the inspection a fire prevention meeting is held to which the general public is invited. At this meeting the State Fire Marshal and other interested citizens discuss the fire prevention movement.

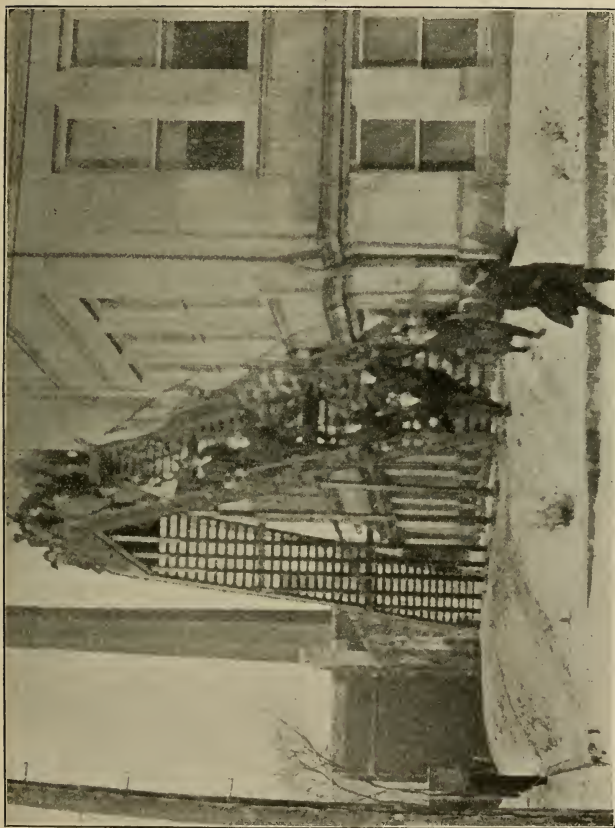
No phase of the fire prevention movement is of more importance than the inspection of hazardous conditions in the various cities by the members of the fire departments. This inspection work has advanced rapidly in the last twelve months, and it is a matter of public record that in those cities where the fire departments are most active in this inspection work, the fire losses have been reduced to a marked degree.

Following is a short resume of the inspection work accomplished by this department during the year 1915:

Number of inspections made.....	31,460
Number of orders issued.....	15,634
Orders for repair of flues	4,125
Orders for repair of buildings	1,415
Orders for erection of fire escapes.....	220
Orders for picture booths.....	365
Orders for correction of electrical defects.....	2,112
Orders for safe storage of gasoline.....	1,425
Orders for removal of rubbish.....	5,320
Orders for safe storage of explosives.....	350
Orders for ropes in hotels.....	112
Special orders.....	225



TUBULAR FIRE ESCAPE ON CHURCHILL SCHOOL BUILDING, GAIESBURG, ILLINOIS.



STEEL STAIRWAY FIRE ESCAPE ON HIGH SCHOOL BUILDING, GALESBURG, ILLINOIS.

DECATUR, ILLINOIS, *January 15, 1916.*

Illinois State Fire Marshal, Springfield, Illinois.

DEAR SIR: I wish to thank you at this beginning of the new year for your hearty cooperation in the matter of fire prevention.



The conditions in this city have never been better than at the present time, and I attribute it largely to the cooperation of your office. The basements are cleaner, the electrical conditions better, and the reserve stocks of our mercantile concerns are kept in better shape from a fire prevention standpoint than ever before.

For several years we have maintained a system of inspection with the uniformed force of this department, but it was some times difficult to get the hearty cooperation of the persons most interested. However, when the order to clean up or to make changes comes from the State they will obey without question.

I have never made a request to your office, either for a clean-up man or for an investigation of a suspicious fire that the answer was not prompt and satis-

factory. The question of fire prevention is one that should be followed up very closely by every fire department in the State and the departments with the help of the State Fire Marshal's force can cut down the losses very materially in any city that will maintain a system of inspections, with the help of your office, which you so readily and efficiently give.

Your truly,

C. W. DEVORE, *Chief of Fire Department.*

INSPECTION OF BUILDINGS AND PREMISES BY FIRE DEPARTMENTS.

[HENRY MAYER, Fire Marshal, Bloomngton, Illinois.]

In reporting the fire prevention work for the year 1915, our records show that the members of the department made 2,312 inspections, condemned and caused to be removed 27 frame barns, 15 sheds, 4 frame houses, and 1 brick theatre building. It ordered repaired and made safe 271 chimneys, 12 furnace smoke pipes, 2 furnaces, 15 fire grates, and condemned the electric wiring in 17 business buildings.

Business and factory buildings are inspected once every three months; hotels and theaters once every week.

In order to facilitate the work the city has been divided into five districts. In this way the ground can be covered systematically, and with much more than usual rapidity.



I can report much progress in the line of fire prevention. So far as preparedness and precaution are concerned, Bloomington is in especially good condition to avert serious fire losses.

The inspections made are reported in duplicate. One blank is left with the owner or occupant, and one with the chief of the fire department. If the inspector finds a building that is not up to standard, the matter is reported on the blank to the owner or occupant, and he is instructed to put the building in safe condition. Within a reasonable length of time a follow-up inspection is made of the buildings so reported in need of attention, to see whether or not the orders have been obeyed. As a

rule, property owners cooperate in making their buildings safe.

The great drawback is over insurance. It seems when a person has plenty of insurance he is content to have a fire, and pays but little attention to cleanliness or keeping down the fire hazard.

The solution of the fire problem is individual liability for fires, fireproof buildings, preventive measures, and the installation of automatic sprinkler systems and cooperation of property owners in fire prevention work. When that time comes the fire hazard will have been reduced to a minimum.

COOPERATION OF FIRE DEPARTMENTS WITH THE STATE FIRE MARSHAL DEPARTMENT IN IN- SPECTION AND INVESTIGATIONS OF INCENDIARY FIRES.

[By M. S. PHILIP, Chief of Fire Department, Chicago Heights,
Illinois.]

Efficiency is the slogan of business to-day, be it public or private. Efficiency is attained through a proper coordination of parts or duties, be it in machine or individual. Efficiency in an organization is attained by a proper coordination of the duties of work of the individuals which compose that organization. Efficiency in a collec-

tion of organizations which depend upon each other for final results and is attained by the cooperation of those organizations, one with another. The lack of cooperation between two efficient



organizations depending upon each other for results, spells inefficiency in the whole and results are abortive. All of which foregoing leads to the inevitable conclusion, that if results are sought in the prevention of fire, through inspection and the propagation of building laws, and the minimizing of unlawful loss and danger by incendiarism, then of necessity there must be wholehearted cooperation between the factors which seek to bring about this condition.

The State Fire Marshal has a distinct duty to perform and in performing it, he is seeking to save us from harming ourselves as well as combating an evil all too prevalent but growing less through his intervention. If this duty be meritorious, then a fire department owes it to itself as a civic duty, if not through a sense

of allegiance to a lawful organization, to accord that mode of cooperation to the State Fire Marshal as will be conducive to a fulfillment of that duty.

A fire department has as distinctive a duty to perform and in the accomplishment of it, not only are lives and property sought to be conserved, but the endeavor made to prevent them being placed in jeopardy. This duty is granted as being meritorious and is the foundation of its birth and existence. This being true, the State Fire Marshal is then as equally under a public obligation to cooperate with fire departments as the converse. In fine, the organizations are so interrelated and yet with separate duties, that one is a complement of the other, hence, cooperation is essential for the full success of either.

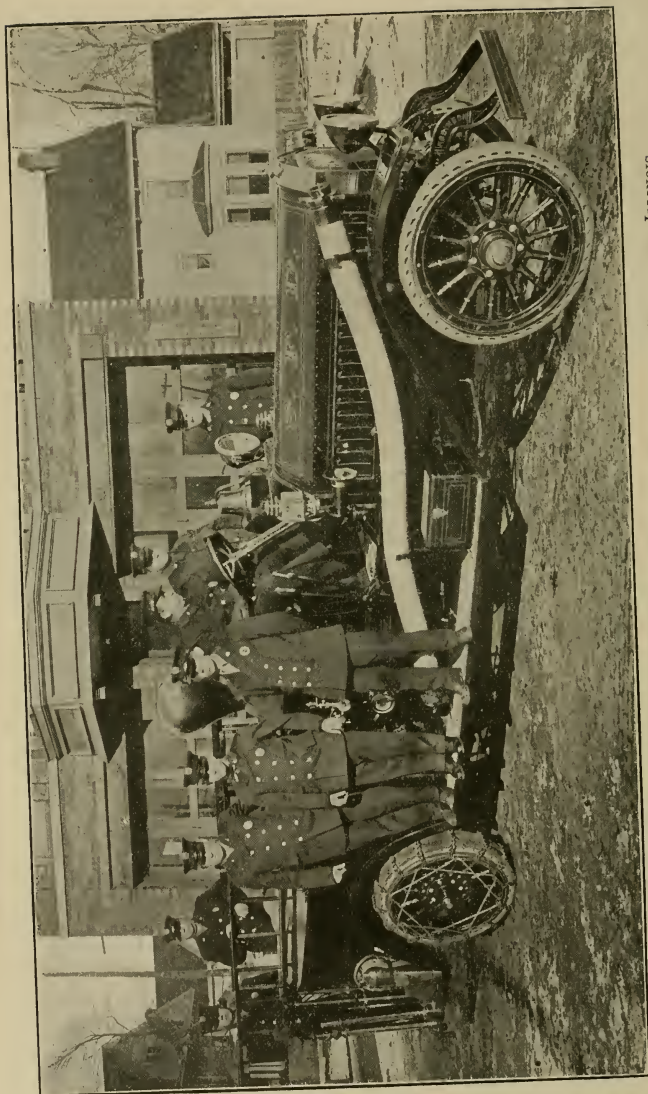
There is scarcely a state fire marshal gracing the office to-day who has not an ambition to gather all the information possible pertaining to the fire losses of his state, to the end that comparisons may be made and statistics enriched. Without this knowledge of totals and causes, we are at sea as to how and where to apply a remedy. A total of so many fires are caused by children playing with matches, correct the activities of the children and enforce the manufacture and use of safe matches; so many are caused by sparks to shingle roofs, defective flues, irresponsible building construction,

initiate legislation for better building codes and increase inspection; so many are caused by carelessness in allowing rubbish to accumulate without notice, etc.

He also has an ambition to be able to report at the end of the year; that the losses for the current year were less than for preceding years; that the number of cases of incendiarism was so small as to be negligible; that through a comprehensive and systematic inspection of buildings in cities which can ill afford to do it themselves, the number of fires has decreased preceptibly; that through a propaganda of education as to the causes of and cures for the prevention of fires, carelessness, the bane of our people has been well nigh eradicated; that through building codes initiated by him, the general construction of buildings is reaching a safer plane and conflagration hazards are being gradually eliminated; in short, by virtue of the foregoing, a large amount of property has been conserved to the people of his commonwealth, taxation for insurance cut to a minimum for generations to come and lives saved which were otherwise jeopardized; then that ambition is nothing if not laudable and commendable and any citizen who withholds cooperation for its fulfillment, not only spites himself but does injury to his nation.

There is scarcely a live fire department to-day, which does not glory in the achievement of having a lesser number of fires with less loss to report this year than last, whether the results have been accomplished through its own endeavors in inspection or in actual combat through its own endeavors by a good organization and skillful treatment, or through some foreign agency. A live fire department endeavors to gain credit for this accomplishment and the endeavor is commendable. What then would be thought of a fire department which has the possibility of augmenting its achievements by cooperation with the State Fire Marshal, yet through a sense of self-sufficiency or lethargy, fails to grasp the opportunity to do credit to itself and assist in decreasing the insurance tax of its people? Every fire department knows of certain defects in building construction, by reason of which fire is liable to start and spread; it knows of buildings which are conceded as fire traps, awaiting the time to take their toll of life, be it occupant or fireman; it knows of premises kept in such dangerous condition, that it needs but the careless hand to start the apparatus going for a hard fight; it knows of numerous ways wherein lives and property may be saved by a little forehanded action. A few fire departments are constrained by political influences, some are unable to get the proper remedial measures and most of them are undermanned, so the abatement of these conditions is neglected. The State Fire Marshal's should be the headquarters of a campaign for the elimination of all these obstacles and the point around which all should rally for the betterment of our commonwealth; for the safeguarding of our families; for the greater safety of the men who hazard their lives in line of duty; for the conservation of the great wealth with which we are blest; and for a decreased taxation for insurance.

Cooperation, teamwork, will be conducive in bringing about this new era.



TRIPLE COMBINATION TRUCK AND CREW, SPRINGFIELD FIRE DEPARTMENT, SPRINGFIELD, ILLINOIS.

PART III.

DEPARTMENT OF INVESTIGATION.

“Can a man take fire to his bosom and his clothes not be burned?”—
Proverbs xxxviii, 27.

DEPARTMENT OF INVESTIGATION.

INVESTIGATIONS, ARRESTS AND PROSECUTIONS.

The following summary is a brief record of the work of the Fire Marshal Department of the State of Illinois for the year 1915, in the investigation of those fires reported to it as being of incendiary origin.

In the investigation of these fires reported as of incendiary origin a thorough investigation frequently brings out the fact that the fire was of accidental origin. In many others it can easily be shown that the fire is of incendiary origin, but not sufficient proof is developed to justify accusing any particular person or persons of having been responsible for it.

In those cases, however, where the investigation shows that the fire was not of accidental origin and further shows the guilt of some particular person or persons, the accumulated evidence is laid before the State's attorney of the county in which the fire occurred for such action as that official deems proper. Many requests for the investigation of suspicious fires now come direct from the State's attorneys themselves, and this department has endeavored to give these officials every assistance possible in an effort to check the actions of incendiaries in this State. Too much credit can not be given to the State's attorneys of the counties in Illinois for the vigorous manner in which they have prosecuted cases of incendiarism which have been brought to their attention.

The large decrease in the fire waste in the city of Chicago, and in the State at large, is no doubt due to the vigorous investigation and prosecution of the members of the arson trust which has for years operated in defiance of the law, and which has defrauded the insurance companies and the people at large with impunity.

The number of fires reported incendiary.....	448
Number of incendiary fires developed.....	312
Number of fires investigated.....	425
Number of arrests	112
Number of indictments	65
Number of cases tried.....	50
Number of persons convicted.....	30
Number of persons acquitted.....	15
Number of mistrials	5
Number of fugitives from justice.....	12
Number of cases pending.....	38

A RECORD OF PROSECUTIONS FOR ARSON AND BURNING TO DEFRAUD IN THE STATE OF ILLINOIS FOR THE YEAR 1915.

This record does not contain those cases which have been brought to trial and the defendants found not guilty:

Scott Stone, Tolono, Champaign County, indicted for arson and murder January 11, 1915. Entered a plea of guilty before Circuit Judge Boggs on January 12, 1916. Sentenced to the penitentiary at Chester for life.

Bert Goff, alias Bert James, Rock Island, Rock Island County, indicted in Adams County for burning to defraud and arson January 23, 1915. Arrested in Rock Island January 27. Taken to Quincy, and entered a plea of guilty to burning to defraud, before Judge Akers. Sentenced to penitentiary for indeterminate term of from one to ten years. Arson indictment dismissed.

Philip Reed (colored), South Beloit, Winnebago County, arrested December 31, 1914, charged with arson. Indicted January, 1915, for arson and conspiracy to defraud. Arraigned February 1, 1915, and entered a plea of guilty to conspiracy to defraud. Sentenced to penitentiary for a term of one year.

U. L. Hudson, Carbondale, Jackson County, indicted for arson January, 1915. Bond fixed at \$500. Before bench warrant could be served, defendant left the State and is now a fugitive from justice.

Edna Hudson, Carbondale, Jackson County, indicted for arson January, 1915. Bond fixed at \$500. Before bench warrant could be served, defendant left the State and is now a fugitive from justice.

Van B. Harrison, Shelbyville, Shelby County, indicted November, 1913, for obtaining money by false pretense. Defendant left the State and is now a fugitive from justice.

Joseph Krushewski, Kewanee, Henry County, indicted for arson and burning to defraud June 3, 1914. Defendant left the State and is now a fugitive from justice.

Joe Paperino, Johnston City, Williamson County, indicted February, 1915, for arson and burning to defraud. Defendant left the State and is now a fugitive from justice.

Lucia Campo, Johnston City, Williamson County, indicted February, 1915, for arson and burning to defraud. Defendant left the State and is now a fugitive from justice.

Louis Thompson, Plymouth, Hancock County, indicted March, 1915, arson and burning to defraud. Before bench warrant could be served Thompson left the State and is now a fugitive from justice.

J. Andy Head, Morrison, Whiteside County, indicted at the October term, 1914, for burning to defraud. Defendant left for Canada and is now a fugitive from justice.

Mary James, Alto Pass, Union County, apprehended while in act of setting fire to a livery barn. Defendant was on probation from the asylum at Anna, and in March, 1915, was returned to that institution.

Harry Glascock, Champaign, Champaign County, arrested March 23, 1915. Indicted April, 1915, for murder and setting fire to cover crime. Tried June 21-26, 1915. Jury returned verdict of guilty. Given life sentence in penitentiary at Chester.

Nathan Miller, Chicago, Cook County, arrested May 6, 1912. Indicted September 19, 1912. Tried in Criminal Court of Cook County, and on July 2, 1915, was found guilty of arson. Sentenced to the penitentiary for an indeterminate term of one to twenty years.

John Martin, alias John Martino, East St. Louis, St. Clair County, arrested April 26, 1915, on charge of burning to defraud. Indicted April, 1915. Case tried in the Circuit Court of St. Clair County July 28-30, 1915. Jury returned verdict of guilty. Sentenced to penitentiary for an indeterminate term of from one to ten years.

Jones Mosely, Mt. Vernon, Jefferson County, arrested October 16, 1914, charged with arson. Preliminary hearing held October 23, 1914. Indicted

January 11, 1915. Defendant forfeited bond and is now a fugitive from justice.

J. Cushman, Chicago, Cook County, arrested August 2, 1915, charged with burning to defraud. Bond fixed at \$2,000. Defendant forfeited bond, and is a fugitive from justice.

George Canfield, Galesburg, Knox County, arrested May 3, 1915. Indicted June, 1915, for malicious destruction of property. Entered a plea of guilty and was released on probation.

Fred Ogden, Galesburg, Knox County, arrested at Davenport, Iowa, February 20, 1915. Taken to Galesburg for preliminary hearing. Indicted June, 1915, for attempted arson and burglary. Entered a plea of guilty to burglary charge and was sentenced to penitentiary for an indeterminate term of from one to ten years.

William A. Young, Alton, Madison County, arrested September 5, 1915, charged with arson. Taken before Judge Henry E. Eaton and a commission of physicians and was adjudged insane. He was committed to the asylum as Jacksonville on September 7, 1915.

Henry Nelson, (colored), Cairo, Alexander County, arrested August 27, 1915. Confessed to having set fire to another's property. Adjudged insane by a commission of physicians and was committed by the county judge to the asylum at Anna, Illinois.

Mrs. Abigail Colby Foster, Freeport, Stephenson County, arrested September 27, 1915, charged with arson. Shortly after arrest she committed suicide while in the county jail. There is no doubt that the woman was insane when she committed both acts.

C. A. Myers, Fairbury, Livingston County, indicted October, 1915, for burning to defraud. Tried in the Circuit Court November 8-10, 1915. Jury returned verdict of guilty. Motion for a new trial entered, and granted by Judge Patton.

Fred Perry, St. Augustine, Knox County, arrested November 1, 1915, charged with setting fires at Galesburg. Taken before County Judge R. C. Rice, and was adjudged insane by a commission of physicians. Committed to asylum at Watertown.

Nicholas Cantillon, East St. Louis, St. Clair County, arrested July 15, 1913, charged with arson and burning to defraud. Indicted September 18, 1913, charged with burning to defraud. Case continued from term to term because of illness of defendant. Cantillon died at Alexian Brothers Hospital, St. Louis, Mo., November 11, 1915.

Clarence Walker, Herrin, Williamson County, arrested November 6, 1915, placed in city jail at Herrin. Set fire to bedding in his cell. Examined as to his sanity before Judge Slater, and was adjudged insane. He was committed to the asylum at Anna.

Roy Gline, Beardstown, Cass County, arrested November 8, 1915. While imprisoned in the city jail at Beardstown he set fire to the bedding in his cell. Examined as to his sanity before Judge Saunders, and was adjudged insane. Committed to the asylum at Watertown.

George David Starkey, Ottawa, LaSalle County, arrested on charge of murdering his wife and child by burning them to death in their home on an island in the Illinois River. Confessed to State's attorney April 1, 1915. Tried in the Circuit Court November 24-25, 1915, and jury returned a verdict of guilty. Sentenced to life imprisonment in the penitentiary.

John Kedis, Springfield, Sangamon County, arrested August 3, 1915. Indicted August 3, 1915, charged with burning to defraud. Tried in the Circuit Court December 1, 1915, and sentenced by Judge Burton to the county jail for 30 days.

George Kardinsky, West Frankfort, Franklin County, arrested July 1, 1915. Indicted September, 1915, charged with arson and burning to defraud. Tried December 3, 1915, and jury failed to agree and was discharged.

Charlie Sisney, West Frankfort, Franklin County, arrested July 1, 1915. Indicted September, 1915, charged with arson and burning to defraud. Tried December 3, 1915, and jury failed to agree and was discharged.

Stanley Madicz, Blue Island, Cook County, arrested November 4, 1915, charged with setting fire to box car in Rock Island yards. Committed to St. Charles School for Boys for an indefinite term.

Frank Marciez, Blue Island, Cook County, arrested November 4, 1915, charged with setting fire to box car in Rock Island yards. Committed to St. Charles School for Boys for an indefinite term.

Mrs. Jennie Rezwein, Chicago, Cook County, arrested November 8, 1915, charged with attempted arson. Examination made as to her sanity at Psychopathic Hospital, and on December 16, 1915, was adjudged to be insane. She was committed to the asylum at Dunning by Judge Scully.

George Skeicansus, Springfield, Sangamon County, indicted August 3, 1915, for burning to defraud. Before case was brought to trial defendant left the jurisdiction of the State and is now a fugitive from justice.

C. M. Jensen, alias Blackey, Alton, Madison County, arrested September 3, 1914, charged with arson. Indicted October 26, 1914, for arson. Defendant left State and is now a fugitive from justice.

Lulu McCann, Quincy, Adams County, arrested June 19, 1915, for attempted arson. Held under bond of \$500 to await action of grand jury. Later charge was reduced to malicious destruction of property. Defendant entered a plea of guilty and was placed on probation.

Frederick Buckminster, Chicago, Cook County, indicted February 20, 1913, charged with arson. Tried December, 1915, for arson in the Criminal Court of Cook County, before Judge Turney, and on December 30, 1915, jury returned a verdict of guilty.

Benjamin Fink, Chicago, Cook County, indicted February 20, 1913, charged with arson. Tried December, 1915, for arson, in the Criminal Court of Cook County, before Judge Turney, and on December 30, 1915, jury returned a verdict of guilty.

Russell McDaniels, Chicago, Cook County, arrested March 8, 1915, charged with arson. Tried in the Criminal Court of Cook County August 10-11, 1915. Jury returned a verdict of guilty, and on August 14, defendant was sentenced to the reformatory at Pontiac.

Richard Rivers, Chicago, Cook County, arrested October 29, 1915. Given preliminary hearing before Judge Fry of the Municipal Court. October 29, 1915, defendant was sentenced to three months in the Bridewell and \$25 fine.

Anton Kodis, Chicago, Cook County, arrested March 19, 1915. Tried in the Criminal Court of Cook County, April, 1915. Jury failed to agree and was discharged.

Joseph Andruska, Chicago, Cook County, arrested March 19, 1915. Tried in the Criminal Court of Cook County, April, 1915. Jury failed to agree and was discharged.

J. A. Wakeman, Chicago, Cook County, arrested July 26, 1915, for arson. Charge reduced to disorderly conduct. On December 3, 1915, sentenced to the county jail for a period of 90 days.

Andrew Sauser, Chicago, Cook County, arrested July 26, 1915, for arson. Charge reduced to disorderly conduct. On December 3, 1915, he was sentenced to the county jail for a period of 20 days.

CHICAGO ARSON TRUST.

REPORT OF COOK COUNTY SPECIAL GRAND JURY.

STATE OF ILLINOIS, }
COUNTY OF COOK, } ss.

IN THE CRIMINAL COURT OF COOK COUNTY.

To the Honorable Richard E. Burke, Judge of Said Court:

The Special Grand Jury convened on March 6, 1913, for the purpose of investigating arson, arson to defraud, and conspiracy to commit arson, having completed its duties according to law, and the



MACLAY HOYNE.
State's Attorney of Cook County.



FRANK JOHNSTON, JR.
First Assistant State's Attorney.



MICHAEL F. SULLIVAN.
Assistant State's Attorney.



JAMES C. O'BRIEN.
Assistant State's Attorney.

OFFICIALS ACTIVE IN PROSECUTION OF INCENDIARIES IN CHICAGO.

instructions of the court, beg to submit the following report of its labors:

Cases considered	61
True bills found	59
Not true bills found.....	2

Total 61

The grand jury further report that from the evidence presented in the specific cases of arson, burning to defraud, and conspiracy to commit arson, which they considered, together with the information derived from prominent insurance men called for examination, they find that arson as a criminal business, has been thoroughly established in Cook County, and particularly in the city of Chicago; that, although arson to defraud insurance companies has been committed for many years, it was not developed into an organized, systematic business until the last ten years.

The grand jury further find that this business of arson is regularly carried on by many of the public insurance adjusters, who, after arranging for the making of fires, also represent the assured in the settlement or adjustment of the claims against the insurance companies.

The grand jury further find that about 50 per cent of the fires in the city of Chicago are of incendiary origin.

In the opinion of the grand jury, some of the causes which contribute to the present alarming and disgraceful conditions are due to serious defects in the present methods of conducting the insurance business.

It is the practice among many of the insurance companies to accept what are commonly known as "rotten risks" from insurance brokers in order that the companies may get the preferred business of such brokers. In other words, if a broker controls desirable business, many of the insurance companies allow him to send in these "rotten risks" for fear that if this doubtful business is refused, the broker may take his preferred business to other companies.

It is also the opinion of the grand jury that the present system pursued by the companies of writing insurance without any checks or safeguards to prevent overinsurance, invites fraud on the part of the dishonest assured. At present it is the custom of the insurance companies to accept the mere statements of an applicant for insurance as to how much other insurance he has already obtained. The applicant's statements are not verified by the companies and no means whatever are used by them to determine the truth of these statements. As a consequence an applicant may obtain insurance in many companies and through several agencies to an amount grossly in excess of the value of the property insured. If the property insured is completely destroyed by fire, so that nothing remains from which the companies can make an estimate of its actual value, it would be difficult, if not impossible to disapprove the value placed upon it by the assured in his proof of loss.

The grand jury further find that insurance companies do not resist vigorously the claims for insurance arising out of crooked fires; and that many of the companies have pursued a weak policy of compromise

engendered by an unnecessary fear of lawsuits, and an overanxiety to establish a reputation for prompt payment of losses.

The grand jury further find that it is admitted by the majority of insurance men that there are serious defects in the present business methods of insurance companies, and that some remedy is imperatively needed.

To that end the grand jury offer the following general suggestions, which, if acceptable and practicable, may be reduced to a definite working basis by the insurance companies.

To minimize and lessen the opportunity for overinsurance, the grand jury recommend that a central bureau, somewhat in the nature of a clearing house, be established and maintained by the voluntary cooperation of the insurance companies, to which all of the insurance policies written by the companies would be ultimately reported. From this bureau a company could obtain accurate information as to the amount of insurance an applicant might have already taken out, and thus be in a position to decide intelligently whether it would be advisable to issue further insurance to the applicant.

A careful inspection should also be made by the companies' inspector of the property sought to be insured in order to ascertain whether it is of sufficient value to justify the amount of insurance applied for. To prevent the removal of goods after inspection, and also to obtain information as to the character of the assured, the city could be divided into districts of reasonable area, and an insurance inspector assigned thereto.

It is apparent, of course, that in order to make the plans suggested effective, cooperation on the part of all, or a majority of the insurance companies would be necessary. It is also true that the expense of operating this plan, although primarily paid by the insurance companies, would be ultimately paid by the insurance borne by the assured, yet, it is the opinion of the grand jury that this cost of operation would be far less than the increased cost of insurance which is now borne by the assured by reason of crooked losses.

It is further recommended by the grand jury that the insurance companies adopt a strong, vigorous policy of boldly fighting every loss that they are convinced is crooked. The present weak practice of compromising such losses should be immediately abandoned, and notice should be served on public adjusters and dishonest assured that under no circumstances will a crooked loss be voluntarily paid. This policy should be firmly and persistently pursued, even though it may involve the expense of many lawsuits. In other words, let it be thoroughly understood that insurance companies have overcome their dread and fear of litigation, and have regained sufficient courage to invite a lawsuit, rather than voluntarily pay a crooked loss. Such a bold, determined stand will, in the opinion of the grand jury, materially assist in discouraging dishonest claims. Furthermore, the grand jury would recommend that the insurance companies use all the means at their command to obtain incriminating evidence of crooked losses, and present this evidence to the State's attorney of Cook County.

In concluding this report the grand jury desire to commend State's Attorney Maclay Hoyne and his first assistant, Frank Johnston, Jr., for

the efficient, thorough and fearless manner in which they have conducted the arson investigation.

Respectfully submitted,
(Signed)

FREDERICK T. HASKELL, *Foreman.*

MEMBERS OF THE TRUST APPREHENDED.

Shortly after the organization of the State Fire Marshal Department, July 1, 1911, Hon. C. J. Doyle, first State Fire Marshal of Illinois, in a speech made before the city club of the city of Chicago, stated that there was in operation at that time in the city of Chicago, and in other large cities of this country, organized bands of men who were engaged in the business of burning property to collect the insurance thereon, who made that their principal business, and who might rightly be termed the "Arson Trust."

Newspapers through the State and country, in commenting on this address, stated that it must be somewhat overdrawn, but subsequent events have proved that instead of being an overdrawn statement, it was founded on fact and was a mild statement of conditions as they then existed.

This department, after its organization, began at once the investigation of a number of fires in the city of Chicago, which were supposed to have been of incendiary origin. This evidence was presented to the State's attorney's office of Cook County, but the State's attorney, J. E. W. Wayman, was loath to start prosecution because of the difficulty usually met in getting convictions in such cases.

In January, 1913, just a little more than a month after State's Attorney Maclay Hoyne took office, Joseph Clarke, a notorious public fire insurance adjuster of Chicago, was arrested for attempting to bribe Edwin J. Raber, an assistant State's attorney of Cook County, Illinois. The attempted bribery grew out of the prosecution of Paul and Edward Covitz, wholesale woolen dealers of Chicago, for burning their stock of goods to obtain the insurance thereon. They were held to the grand jury and while the case was pending for indictment, Joseph Clarke offered Edwin J. Raber \$1,000 if he would defeat the indictment by having a no bill returned, or else draw a defective indictment if a true bill were returned. On investigating the business and character of Joseph Clarke in regard to this attempted bribery, Mr. Hoyne found that he was engaged in the criminal systematic business of arson, and further that other public insurance adjusters, such as Nathan Spira, Harry Brown and Julius Zar, who composed the firm of Spira, Zar and Brown, were similarly engaged. Mr. Hoyne thereupon directed his first assistant, Mr. Frank Johnston, Jr., to begin a thorough investigation of these conditions in Chicago. The investigation commenced instantly, namely, on the night of the day in which Clarke was arrested, and extended over a period of four months. Hundreds of witnesses were summoned into the State's attorney's office and examined, including leading insurance agents of Chicago, company insurance adjusters, public insurance adjusters, and everybody who was supposed to have any knowledge of incendiary fires, or connection with the fire insurance or fire adjusting business. The reports of suspicious fires con-

tained in the State Fire Marshal's office, and also in the city fire attorney's office were examined and used as sources of information.

The first real opening into the situation was obtained through a statement of a man by the name of Louis Gettleson, which was found in the State's attorney's office, and which was made during the previous administration of office, in connection with a fire for which Gettleson had been indicted. In this statement Gettleson implicated Joseph Clarke, the notorious public insurance adjuster, Harry Brown, another public insurance adjuster, equally notorious, and Samuel Rothenberg, a go-between. Rothenberg was sent for and threatened with indictment, and confessed. Brown and Clarke were thereupon indicted upon the testimony of Rothenberg and Gettleson. Clarke secured bail, but Brown was unable to get bail, and was held in the county jail. After he had been there several weeks, he offered, on condition that his bail be reduced to an amount which would enable him to get out of jail, to disclose the name of one of the principal professional fire bugs who had been operating for 10 or 15 years in Chicago, and within the past 3 or 4 years with Joseph Clarke. He was commonly known as Joseph Clarke's fire bug. This man was named John Danies, alias Kubitz, Kubicek, and "The Captain." Brown's offer was accepted, and Danies was located just outside of New York City, where he was conducting a roadhouse. He was arrested and brought back to Chicago, and confessed to having set 18 fires in the city of Chicago, principally for well-to-do merchants and shopkeepers.

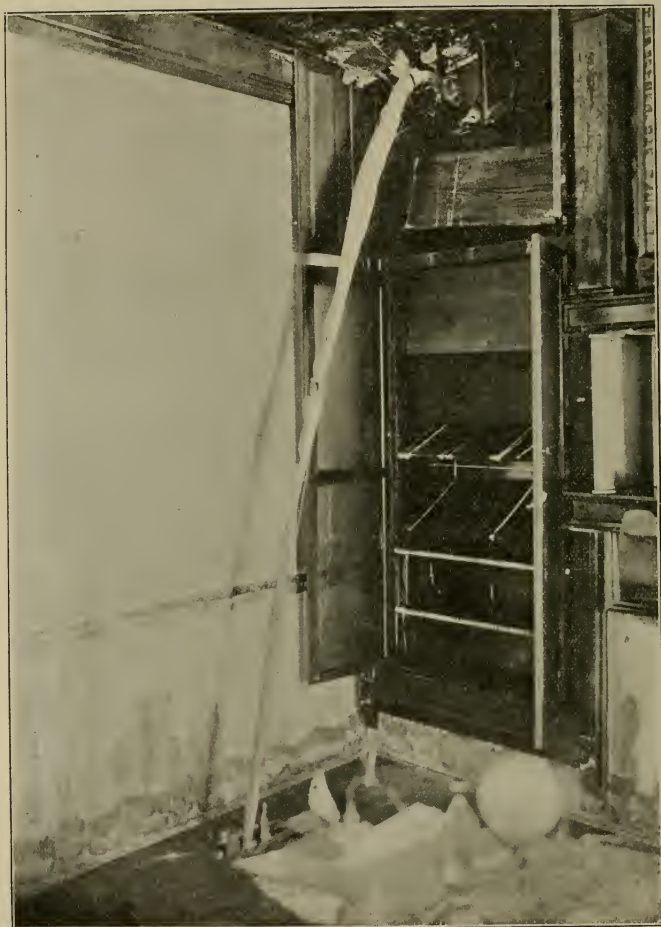
In the meantime efforts were being made to obtain a confession from Ben Fink, another notorious fire bug, who had operated for several years in the city of Chicago, and who at that time was in jail at South Bend, Indiana, under indictment for setting fire to the store of a merchant by the name of Benjamin Kahn at South Bend. Fink finally confessed to having set 17 fires in the city of Chicago, of about the same class and kind as the ones of Danies.

After securing corroborative evidence of Danies and Fink, Mr. Hoyne called a special grand jury in April, 1913, and secured 59 indictments. After the special grand jury was dismissed the investigation was continued further, and mainly on the testimony of Mrs. Korshak, wife of David Korshak, a notorious fire bug, 25 more indictments were returned, making a total of 84 indictments. The number of men indicted was 65, some of whom had several indictments against them. The number of fires out of which the indictments arose was 35.

As a result of this investigation and prosecution 22 members of this "Arson Trust" have been convicted and sentenced to the penitentiary at Joliet. A number of cases against other members of the "Trust" are still pending.



CASSEL HALL, A TWENTY-TWO ROOM DWELLING AT DECATUR, ILLINOIS. SCENE OF AN INCENDIARY FIRE DECEMBER 30, 1915. THIS PROPERTY HAD RECENTLY COME INTO POSSESSION OF BELLE D. WOLF, OF SULLIVAN, ILLINOIS, WIFE OF JOHN M. WOLF. IT WAS INSURED IN THE MILLERS NATIONAL INSURANCE COMPANY FOR \$17,000, AND WAS VACANT AT THE TIME OF THE FIRE.



ONE OF THE ROOMS IN CASSEL HALL SHOWING PREPARATIONS MADE BY THE INCENDIARY.



FRONT ROOM ON THE LOWER FLOOR, CASSEL HALL.



ANOTHER ROOM IN CASSEL HALL SHOWING HOW INCENDIARY HAD PLANNED TO CAUSE THE DESTRUCTION OF THE PROPERTY.



CASSEL HALL AS IT APPEARED AFTER THE FIRE. THE DECATUR FIRE DEPARTMENT DID AN ESPECIALLY FINE PIECE OF WORK IN CONTROLLING THIS BLAZE.

PART IV.

THE STATISTICAL RECORD.

“Good citizenship demands that all, individually and collectively, should do their full part in inculcating principles, and bringing about practices which will stop the ravages of the tremendous fire waste that is scandalous, because obviously preventable.”

STATISTICAL STATEMENT.

Aggregate value of buildings and contents showing insurance thereon and total damage by fire in the State of Illinois from January 1, 1915, to December 31, 1915:

Total value of buildings in which fires have occurred.....	\$66,037,095
Total damage to said buildings.....	6,560,366
Total insurance on said buildings.....	37,494,738
Total value of contents of buildings in which fires occurred.....	32,668,175
Total damage to said contents.....	5,238,203
Total insurance on said contents.....	20,756,251
Total fire loss in the State of Illinois.....	11,798,569
Total number of fires in the State of Illinois.....	12,450

Aggregate value of buildings and contents showing insurance thereon and total damage by fire outside of the city of Chicago from January 1, 1915, to December 31, 1915:

Total value of buildings in which fires have occurred.....	\$21,735,838
Total damage to said buildings.....	5,037,459
Total insurance to said buildings.....	12,581,626
Total value on contents of buildings in which fires occurred.....	12,152,998
Total damage to said contents.....	3,515,090
Total insurance of said contents.....	7,415,471
Total fire loss outside the City of Chicago.....	8,552,549
Total number of fires outside the City of Chicago.....	7,146

Aggregate value of buildings and contents showing insurance thereon and total damage by fire in the city of Chicago from January 1, 1915, to December 31, 1915:

Total value of buildings in which fires have occurred.....	\$44,301,257
Total damage to said buildings.....	1,522,907
Total insurance on said buildings.....	24,913,112
Total value of contents of buildings in which fires occurred.....	20,515,177
Total damage to said contents.....	1,723,113
Total insurance on said contents.....	13,340,780
Total fire loss in the city of Chicago.....	3,246,020
Total number of fires in the city of Chicago.....	5,304

Classification of the fire loss in the State of Illinois, giving the number of fires and the loss classified according to causes:

Causes.	No.	Amount.
Chimneys, flues, cupolas and stacks, overheated or defective	1,119	\$ 887,975
Electricity	352	448,774
Explosions	95	445,084
Exposure	755	776,020
Fireworks, fire crackers, balloons, etc.....	42	11,649
Friction	18	39,773
Gas—Natural and artificial.....	149	43,107
Hot ashes and coals.....	157	26,353
Hot grease, oil, tar, wax, asphalt, ignition of hot or molten metal	142	63,674
Incendiarism	448	494,208
Lightning—buildings rodged	1	2,500
Lightning—buildings not rodged	423	395,634
Matches	973	287,502
Miscellaneous	119	25,467
Open fires	126	36,198

Causes.	No.	Amount.
Open lights	326	\$ 53,613
Petroleum and its products.....	788	502,928
Rubbish and litter	328	146,772
Smoking (cigars, cigarettes, pipes, etc.).....	277	257,777
Sparks—arising from combustion.....	1,354	497,466
Sparks—occasioned by running machinery, including pick- ers, carding machines, gins, etc.....	180	185,208
Spontaneous combustion	353	492,601
Steam and hot water pipes.....	24	4,568
Stoves, furnaces, boilers and their pipes.....	913	484,811
Unknown	2,988	5,178,907
Totals	12,450	\$11,798,569

Classification of the number of fires and the loss therefrom, listed according to the property destroyed.

	No.	Amount.
Apartment houses, flats and rooming houses.....	542	\$ 140,303
Bakeries	42	15,346
Barber shops	34	20,598
Barns and stables (not liveryes).....	1,171	896,550
Churches	70	159,227
Depots, stations, waiting rooms, etc.....	17	6,970
Dry cleaning establishments	33	6,837
Dry houses, kilns, rooms, etc.....	4	1,410
Dwellings	5,971	2,869,455
Elevators and grain warehouses.....	34	318,049
Factories	334	1,731,368
Foundries	19	48,212
Garages	203	283,256
Granaries	11	6,369
Green houses	7	1,162
Halls, (lodge) (club) (dance) (public) etc.....	74	152,940
Hotels and boarding houses.....	101	229,499
Hospitals	9	17,225
Ice houses	16	137,145
Jails	10	6,536
Laundries	15	16,480
Liveryes	20	42,073
Mills (flour)	12	45,175
Mills (saw and planing)	9	3,605
Office buildings	128	441,388
Oil houses	2	450
Photo studios	12	6,861
Power houses, pump houses and engine houses.....	30	128,435
Restaurants	89	60,401
Saloons	153	140,538
Sheds	591	82,635
Smokehouses	52	6,008
Silos	6	1,525
Stores	1,207	2,574,533
Shops, (carpenter, blacksmith, etc.).....	200	213,783
Schools (colleges, seminaries, etc.).....	62	155,880
Theaters and motion picture houses.....	41	65,670
Warehouses	152	290,367
Miscellaneous	275	138,062
Automobiles	299	83,209
Boats	20	17,160
Bridges	8	3,825
Cars (railway) (electric) etc.	119	34,235
Docks (coal) etc.	3	52,110
Fences	22	815
Grain and hay	117	50,495
Junk yards	7	880

	No.	Amount.
Lumber yards	30	\$ 81,514
Tanks (water) etc.	16	41,344
Tents	1	1,300
Threshing outfits	3	721
Trestles	11	3,035
Wagons	36	1,600

Totals 12,450 \$11,798,569

Number of fires and the loss therefrom in the State of Illinois for each month of the year 1915.

Month.	No. of fires.	Fire loss.	Month.	No. of fires.	Fire loss.
January	1,008	\$1,277,018	July	935	\$579,456
February	733	990,521	August	669	613,840
March	1,078	1,259,602	September	859	845,323
April	1,196	1,156,859	October	1,405	656,608
May	861	843,564	November	1,698	1,292,300
June	585	573,053	December	1,423	1,710,425

Number of fires and the loss therefrom in the State of Illinois outside the city of Chicago for each month of the year 1915.

Month.	No. of fires.	Fire loss.	Month.	No. of fires.	Fire loss.
January	583	\$889,873	July	425	\$451,916
February	415	600,346	August	324	547,070
March	668	976,192	September	431	494,383
April	792	934,704	October	769	519,183
May	551	661,659	November	1,012	1,116,485
June	311	408,443	December	865	952,295

Number of fires and the loss therefrom in the city of Chicago for each month of the year 1915.

Month.	No. of fires.	Fire loss.	Month.	No. of fires.	Fire loss.
January	425	\$387,145	July	510	\$127,540
February	318	390,175	August	345	66,770
March	410	283,410	September	428	350,940
April	404	222,155	October	636	137,425
May	310	181,905	November	686	175,815
June	274	164,610	December	558	758,130



ARCADE AND DECATUR HOTELS, DECATUR, ILLINOIS.



ARCADE AND DECATUR HOTELS TWO HOURS AFTER START OF FIRE WHICH OCCURRED APRIL 21, 1915, AND WHICH CAUSED THE DEATH OF TWO PERSONS AND THE DESTRUCTION OF \$100,000 WORTH OF PROPERTY.

DEATHS BY FIRE.

THE TOLL OF HUMAN LIFE.

There were reported to the Fire Marshal Department during the year 1915 a total of 263 deaths directly caused by fire. This list does not include explosions in mines, nor does it include those whose deaths were caused by burns due to scalds.

While it is a matter for congratulation that the total number of accidental deaths by fire is 24 less than during the year 1914, and 124 less than in 1913, the fact still remains that most of these deaths were due directly to gross carelessness and ignorance.

A great deal of publicity has been given by this department to the danger of starting fires with kerosene. There were 26 people burned to death by this practice in 1915, 13 less than during the previous year.

Twenty-three people were burned to death by having their clothes ignited from bonfires. This number is 4 less than were burned to death from the same cause during the year 1914, and a reduction of 22 from 1913. Twenty-four persons lost their lives by having their clothes ignited from matches, this being a reduction of 10 deaths from the same cause in 1914, and 16 less than in 1913.

A startling increase, however, is shown in the deaths resulting from having clothing ignited by hot stoves and grates, there having been 55 such casualties during the year 1915, 16 more than occurred during either of the 2 years previous.

An increase is also shown in the number who were burned to death in burning buildings, there having been 47 such fatalities in 1915, an increase of 21 over the year 1914, and a reduction of 9 from 1913.

Following is a complete summary of the accidental deaths by fire during the past year, listed under the various causes:

Clothing ignited by stoves and grates	55	Electrocuted or burned by live wires	5
Burned in burning buildings.....	47	Clothing ignited by sparks from pipes	5
Gasoline explosions	35	Stove polish explosions.....	4
Starting fires with kerosene.....	26	Struck by lightning.....	4
Clothing ignited by matches	24	Fireworks display explosions.....	2
Clothing ignited by bonfires	23	Clothing ignited from Christmas trees	2
Clothing ignited in manner unknown	10	Celluloid comb caught on fire.....	2
Clothing ignited by kerosene lamps	10	Moving picture film explosion.....	1
Gas explosions	8		

FIRE LOSSES IN ILLINOIS CITIES.

**A Comparative Statement of the Number of Fires, Fire Losses and
Other Data in Those Cities of Illinois Having
More Than 15,000 Population.**



FIRE CHIEF THOMAS O'CONNOR.
City of Chicago.

FIRE LOSSES IN ILLINOIS CITIES.

CHICAGO.

Total number of fires, 5,304.
 Loss on buildings, \$1,522,907.
 Loss on personal property, \$1,723,113.
 Total fire loss, \$3,246,020.
 Fire loss in 1913, \$5,600,000.
 Fire loss in 1914, \$4,567,495.
 Decrease for 1915, \$1,321,475.

PEORIA.

Population, 72,000.
 Total number of fires, 543.
 Loss on buildings, \$165,849.
 Loss on personal property, \$104,463.
 Total fire loss, \$270,312.
 Loss per fire, \$497.
 Per capita loss, \$3.75.
 Fire loss in 1913, \$407,987.
 Fire loss in 1914, \$356,657.
 Decrease for 1915, \$86,345.
 Number of fire stations, 10.
 Number of men in department, 82.
 Number of pieces of motor apparatus, 3.
 Fire Chief, T. N. Worm.
 Assistant Fire Chiefs, Edwin Sites
 and Benjamin Butler.

EAST ST. LOUIS.

Population, 71,000.
 Total number of fires, 393.
 Loss on buildings, \$97,086.
 Loss on personal property, \$104,598.
 Total fire loss, \$201,684.
 Loss per fire, \$513.
 Per capita loss, \$2.84.
 Fire loss in 1913, \$637,540.
 Fire loss in 1914, \$440,443.
 Decrease for 1915, \$238,759.
 Number of fire stations, 7.
 Number of men in department, 78.
 Number of pieces of motor apparatus, 2.
 Fire Chief, M. J. Tobin.
 Assistant Fire Chief, Philip Thomas.

SPRINGFIELD.

Population, 60,000.
 Total number of fires, 507.
 Loss on buildings, \$145,937.
 Loss on personal property, \$242,391.
 Total fire loss, \$388,328.
 Loss per fire, \$766.
 Per capita loss, \$6.47.
 Fire loss in 1913, \$276,136.

SPRINGFIELD—Concluded.

Fire loss in 1914, \$108,359.
 Increase for 1915, \$279,969.
 Number of fire stations, 8.
 Number of men in department, 77.
 Number of pieces of motor apparatus, 3.
 Fire Chief, Peter Jacobs.
 Assistant Fire Chief, Matt. Cullen.

ROCKFORD.

Population, 54,000.
 Total number of fires, 235.
 Loss on buildings, \$10,904.
 Loss on personal property, \$16,034.
 Total fire loss, \$26,938.
 Loss per fire, \$114.
 Per capita loss, 50 cents.
 Fire loss in 1913, \$59,464.
 Fire loss in 1914, \$17,784.
 Increase for 1915, \$9,153.
 Number of fire stations, 6.
 Number of men in department, 67.
 Number of pieces of motor apparatus, 9.
 Fire Chief, Frank E. Thomas.
 Assistant Fire Chief, S. T. Julian.

QUINCY.

Population, 40,000.
 Total number of fires, 185.
 Loss on buildings, \$29,207.
 Loss on personal property, \$57,195.
 Total fire loss, \$86,402.
 Loss per fire, \$467.
 Per capita loss, \$2.16.
 Fire loss in 1913, \$504,000.
 Fire loss in 1914, \$406,464.
 Decrease for 1915, \$320,062.
 Number of fire stations, 8.
 Number of men in department, 43.
 Number of pieces of motor apparatus, 3.
 Fire Chief, George Marriott.
 Assistant Fire Chief, Ed. Yates.

JOLIET.

Population, 40,000.
 Total number of fires, 151.
 Loss on buildings, \$104,039.
 Loss on personal property, \$150,095.
 Total fire loss, \$254,134.
 Loss per fire, \$1,683.
 Per capita loss, \$6.35.
 Fire loss in 1913, \$11,557.

JOLIET—Concluded.

Fire loss in 1914, \$23,902.
 Increase for 1915, \$230,232.
 Number of fire stations, 5.
 Number of men in department, 39.
 Number of pieces of motor apparatus, 5.
 Fire Chief, C. W. Royce.
 Assistant Fire Chief, Thomas J. Ruddy.

AURORA.

Population, 36,000.
 Total number of fires, 169.
 Loss on buildings, \$31,264.
 Loss on personal property, \$66,052.
 Total fire loss, \$97,416.
 Loss per fire, \$576.
 Per capita loss, \$2.70.
 Fire loss in 1913, \$51,973.
 Fire loss in 1914, \$30,306.
 Increase for 1915, \$67,110.
 Number of fire stations, 5.
 Number of men in department, 30.
 Number of pieces of motor apparatus, 4.
 Fire Chief, George J. Rang.
 Assistant Fire Chief, H. Hamsmith.

DECATUR.

Population, 35,000.
 Total number of fires, 268.
 Loss on buildings, \$123,085.
 Loss on personal property, \$40,925.
 Total fire loss, \$164,010.
 Loss per fire, \$612.
 Per capita loss, \$4.68.
 Fire loss in 1913, \$65,000.
 Fire loss in 1914, \$626,129.
 Decrease for 1915, \$462,119.
 Number of fire stations, 4.
 Number of men in department, 35.
 Number of pieces of motor apparatus, 6.
 Fire Chief, C. W. Devore.
 Assistant Fire Chief, Edward Platt.

DANVILLE.

Population, 33,000.
 Total number of fires, 242.
 Loss on buildings, \$79,359.
 Loss on personal property, \$134,135.
 Total fire loss, \$213,494.
 Loss per fire, \$886.
 Per capita loss, \$6.46.
 Fire loss in 1913, \$82,000.
 Fire loss in 1914, \$79,879.
 Increase for 1915, \$133,615.
 Number of fire stations, 6.
 Number of men in department, 36.
 Number of pieces of motor apparatus, 1.
 Fire Chief, Perry Cessna.
 Assistant Fire Chief, William Hilge.

EVANSTON.

Population, 32,000.
 Total number of fires, 230.
 Loss on buildings, \$16,896.
 Loss on personal property, \$9,890.
 Total fire loss, \$26,786.
 Loss per fire, \$116.
 Per capita loss, 84 cents.
 Fire loss in 1913, \$24,000.
 Fire loss in 1914, \$68,751.
 Decrease for 1915, \$41,965.
 Number of fire stations, 3.
 Number of men in department, 34.
 Number of pieces of motor apparatus, 2.
 Fire Chief, A. N. Hofstetter.
 Assistant Fire Chief, T. H. Norman.

BLOOMINGTON.

Population, 30,000.
 Total number of fires, 145.
 Loss on buildings, \$6,100.
 Loss on personal property, \$11,159.
 Total fire loss, \$17,259.
 Loss per fire, \$119.
 Per capita loss, 57 cents.
 Fire loss in 1913, \$26,177.
 Fire loss in 1914, \$19,056.
 Decrease for 1915, \$1,797.
 Number of fire stations, 5.
 Number of men in department, 34.
 Number of pieces of motor apparatus, 8.
 Fire Chief, Henry Mayer.
 Assistant Fire Chief, Charles Abrams.

OAK PARK.

Population, 27,000.
 Total number of fires, 139.
 Loss on buildings, \$14,492.
 Loss on personal property, \$7,481.
 Total fire loss, \$21,973.
 Loss per fire, \$158.
 Per capita loss, 81 cents.
 Fire loss in 1913, \$64,390.
 Fire loss in 1914, \$31,041.
 Decrease for 1915, \$9,068.
 Number of fire stations, 3.
 Number of men in department, 20.
 Number of pieces of motor apparatus, 4.
 Fire Chief, H. J. Schoff.
 Assistant Fire Chief, George Houren.

GALESBURG.

Population, 26,000.
 Total number of fires, 156.
 Loss on buildings, \$15,423.
 Loss on personal property, \$24,048.
 Total fire loss, \$39,471.
 Loss per fire, \$252.
 Per capita loss, \$1.52.
 Fire loss in 1913, \$43,250.

GALESBURG—Concluded.

Fire loss in 1914, \$64,067.
Decrease for 1915, \$24,596.
Number of fire stations, 3.
Number of men in department, 17.
Number of pieces of motor apparatus, none.
Fire chief, M. J. Peterson.
Assistant fire chief, A. G. Lowderman.

ELGIN.

Population, 26,000.
Total number of fires, 96.
Loss on buildings, \$6,439.
Loss on personal property, \$3,128.
Total fire loss, \$9,567.
Loss per fire, \$99.
Per capita loss, 37 cents.
Fire loss in 1913, \$45,000.
Fire loss in 1914, \$24,100.
Decrease for 1915, \$14,533.
Number of fire stations, 5.
Number of men in department, 27.
Number of pieces of motor apparatus, none.
Fire chief, William Haible.

BELLEVILLE.

Population, 25,000.
Total number of fires, 145.
Loss on buildings, \$12,703.
Loss on personal property, \$10,351.
Total fire loss, \$23,054.
Loss per fire, \$159.
Per capita loss, 92 cents.
Fire loss in 1913, \$32,000.
Fire loss in 1914, \$16,000.
Increase for 1915, \$7,054.
Number of fire stations, 2.
Number of men in department, 18.
Number of pieces of motor apparatus, none.
Fire chief, H. C. Kunz.
Assistant fire chief, James Bosworth.

MOLINE.

Population, 25,000.
Total number of fires, 120.
Loss on buildings, \$8,559.
Loss on personal property, \$6,678.
Total fire loss, \$15,237.
Loss per fire, \$127.
Per capita loss, 61 cents.
Fire loss in 1913, \$35,000.
Fire loss in 1914, \$23,658.
Decrease for 1915, \$8,421.
Number of fire stations, 4.
Number of men in department, 27.
Number of pieces of motor apparatus, 7.
Fire chief, J. Q. Hawk.
Assistant fire chief, James J. Trevon.

ROCK ISLAND.

Population, 25,000.
Total number of fires, 157.
Loss on buildings, \$22,399.
Loss on personal property, \$20,399.
Total fire loss, \$42,798.
Loss per fire, \$272.
Per capita loss, \$1.71.
Fire loss in 1913, \$342,000.
Fire loss in 1914, \$30,206.
Increase for 1915, \$12,592.
Number of fire stations, 5.
Number of men in department, 29.
Number of pieces of motor apparatus, 3.
Fire chief, G. W. Newberry.
Assistant fire chief, Peter Frey.

FREEPORT.

Population, 21,000.
Total number of fires, 117.
Loss on buildings, \$4,503.
Loss on personal property, \$10,260.
Total fire loss, \$14,763.
Loss per fire, \$126.
Per capita loss, 70 cents.
Fire loss in 1913, \$53,808.
Fire loss in 1914, \$8,609.
Increase for 1915, \$6,154.
Number of fire stations, 3.
Number of men in department, 20.
Number of pieces of motor apparatus, 4.
Fire chief, J. F. Rodemeyer.
Assistant fire chief, H. T. Lawson.

ALTON.

Population, 20,000.
Total number of fires, 119.
Loss on buildings, \$39,540.
Loss on personal property, \$17,600.
Total fire loss, \$57,140.
Loss per fire, \$480.
Per capita loss, \$2.85.
Fire loss in 1913, \$67,000.
Fire loss in 1914, \$59,285.
Decrease for 1915, \$2,145.
Number of fire stations, 5.
Number of men in department, 23.
Number of pieces of motor apparatus, 2.
Fire chief, William Feldwisch.
Assistant fire chief, Barney Osterman.

WAUKEGAN.

Population, 18,000.
Total number of fires, 98.
Loss on buildings, \$28,000.
Loss on personal property, \$34,500.
Total fire loss, \$62,500.
Loss per fire, \$638.
Per capita loss, \$3.47.
Fire loss in 1913, \$18,000.

WAUKEGAN—Concluded.

Fire loss in 1914, \$21,000.
 Increase for 1915, \$41,500.
 Number of fire stations, 2.
 Number of men in department, 15.
 Number of pieces of motor apparatus, 2.
 Fire chief, Sars O'Farrell.
 Assistant fire chief, D. A. Hutton.

CHAMPAIGN.

Population, 17,000.
 Total number of fires, 102.
 Loss on buildings, \$11,903.
 Loss on personal property, \$239,389.
 Total fire loss, \$356,292.
 Loss per fire, \$3,493.
 Per capita loss, \$20.95.
 Fire loss in 1913, \$47,339.
 Fire loss in 1914, \$31,935.
 Increase for 1915, \$324,357.
 Number of fire stations, 1.
 Number of men in department, 10.
 Number of pieces of motor apparatus, 5.
 Fire chief, John Ely.
 Assistant fire chief, Roy Alsip.

JACKSONVILLE.

Population, 17,000.
 Total number of fires, 96.
 Loss on buildings, \$15,574.
 Loss on personal property, \$4,844.
 Total fire loss, \$20,418.
 Loss per fire, \$212.
 Per capita loss, \$1.20.
 Fire loss in 1914, \$67,641.
 Decrease for 1915, \$47,223.
 Number of fire stations, 1.
 Number of men in department, 11.
 Number of pieces of motor apparatus, none.
 Fire chief, Samuel Hunt.
 Assistant fire chief, Carl Cokely.

CHICAGO HEIGHTS.

Population, 16,000.
 Total number of fires, 88.
 Loss on buildings, \$10,597.
 Loss on personal property, \$12,863.

CHICAGO HEIGHTS—Concluded.

Total fire loss, \$23,460.
 Loss per fire, \$266.
 Per capita loss, \$1.48.
 Fire loss in 1913, \$26,200.
 Fire loss in 1914, \$17,450.
 Increase for 1915, \$6,010.
 Number of fire stations, 2.
 Number of men in department: paid, 13; volunteers, 20.
 Number of pieces of motor apparatus, 2.
 Fire chief, M. S. Philip.
 Assistant fire chief, Elmer E. Somes.

STREATOR.

Population, 16,000.
 Total number of fires, 95.
 Loss on buildings, \$14,704.
 Loss on personal property, \$3,696.
 Total fire loss, \$18,400.
 Loss per fire, \$194.
 Per capita loss, \$1.15.
 Fire loss in 1913, \$19,624.
 Fire loss in 1914, \$14,778.
 Increase for 1915, \$3,681.
 Number of fire stations, 2.
 Number of men in department, 10.
 Number of pieces of motor apparatus, none.
 Fire chief, F. A. Owen.
 Assistant fire chief, Daniel Warrell.

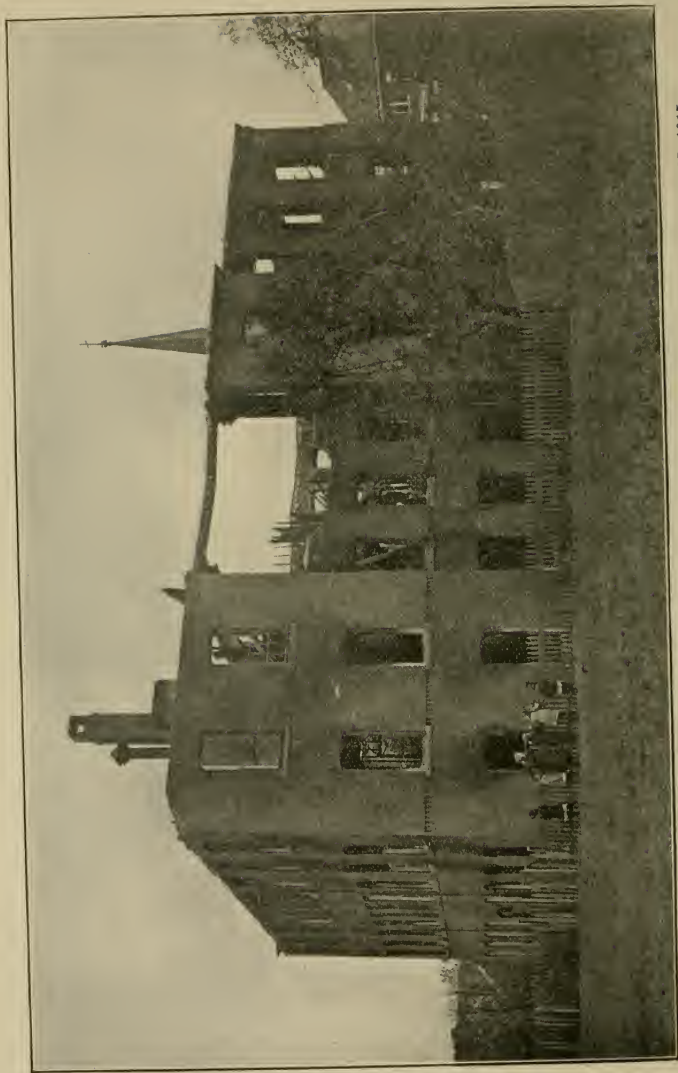
KANKAKEE.

Population, 15,000.
 Total number of fires, 88.
 Loss on buildings, \$7,705.
 Loss on personal property, \$16,099.
 Total fire loss, \$23,804.
 Loss per fire, \$270.
 Per capita loss, \$1.58.
 Fire loss in 1913, \$10,490.
 Fire loss in 1914, \$6,745.
 Increase for 1915, \$17,059.
 Number of fire stations, 2.
 Number of men in department, 13.
 Number of pieces of motor apparatus, 2.
 Fire chief, M. S. Baker.
 Assistant fire chief, Edward Alberts.

PART V.

MISCELLANEOUS.

One fire burns out and another's burning.—*Shakespeare.*



ST. JOHN'S PAROCHIAL SCHOOL, PEABODY, MASS., AS IT APPEARED AFTER THE FIRE OF OCTOBER 25, 1915.

PEABODY SCHOOL DISASTER.

TWENTY-TWO GIRLS BURNED TO DEATH IN SCHOOL FIRE.

At 8:30 o'clock on the morning of October 25, 1915, the pupils of St. John's Parochial School, Peabody, Mass., had just settled down to their morning's work when fire was discovered in one of the rooms of the basement, used for the storage of waste paper.

The Sister Superior pressed the button which had so often sounded the call to fire drill in the 18 rooms of the school. The orderly tramp of the children's feet began instantly. They were used to the fire drill. Soon the corridors were filled with smoke, and before more than half of the 400 children had emerged from the doors, panic struck the ranks of those coming behind.

Just at the door one little tot stumbled and fell. Instantly the whole remaining ranks of children behind her were thrown out of stride, and into panic, and immediately scores were thrown off their feet. A stream of pupils kept coming, broke, swerving to right and left of the fallen, but the heap of fallen never got out. It was a dune of death. Of the 22 children, all girls, who were burned and trampled to death, most of them were found at the doorway.

A horrible 10 minutes, and the red drama of that October morning had spent itself. And this occurred despite the graphic lesson of the Slocum disaster, the Iroquois Theater holocaust, the Triangle Shirt-waist horror, and other like events which have brought cruelly home to the public mind the fact that every terrible fire is small at first, and could have been prevented by proper and simple safeguards.

In their work of inspection our deputies find schools in Illinois with conditions fully as bad and just as dangerous should a fire occur as was the school at Peabody, Mass. They are instructed to issue peremptory orders to school boards and principals for the removal of such hazardous conditions wherever found.

Are your children properly safeguarded from fire in the school which they are compelled to attend?

ACETYLENE GAS EXPLOSION.

GAS EXPLOSION DEMOLISHES HOUSE AT PARIS, ILL.

Shortly before 6 o'clock Saturday evening, January 15, 1916, an explosion of acetylene gas in the residence of W. D. Cole, at Paris, Ill., completely wrecked the building and instantly killed Mr. Cole's 18-year-old daughter, Miss Florence Cole. The dwelling and premises gave evidence of a terrific explosion. The pantry and kitchen were entirely blown away, together with the south porch, and the west wall of the dining room was caved in. The furniture in a number of rooms was splintered to atoms. It is evident that the explosion was caused by a defect in the acetylene lighting plant.

The plant in operation at this residence was one of old style equipment, which had been in use for about 10 years. The generator tank was located in a small brick building a short distance removed from

the rear of the dwelling proper. This tank was equipped with an automatic feed arrangement which dropped a certain amount of calcium carbide into it at regular intervals. It is reported that this feed arrangement frequently dropped an excess amount of carbide into the tank, thereby creating an oversupply of gas, producing, of course, extra pressure.

It is probable that this automatic feed arrangement dropped an exorbitant amount of carbide into the tank, and the excessive amount of gas generated was forced through a leak or some defect in the pipe arrangement, thereby filling the generator house with gas.

This excess gas was probably forced out of the generator room along the pipes, into the dwelling where it came in contact with the fire in the kitchen stove, and caused a slight explosion in the dwelling proper, and this explosion back-fired into the generator house, where the gas therein confined exploded with terrific force.

The violence of the explosion is shown by the fact that scarcely a whole brick was left of the material used in the generator house.

FIGHTING FIRES WITH THE BOOSTER PUMP.

[By FRANK E. THOMAS, Chief of Fire Department, Rockford, Illinois.]

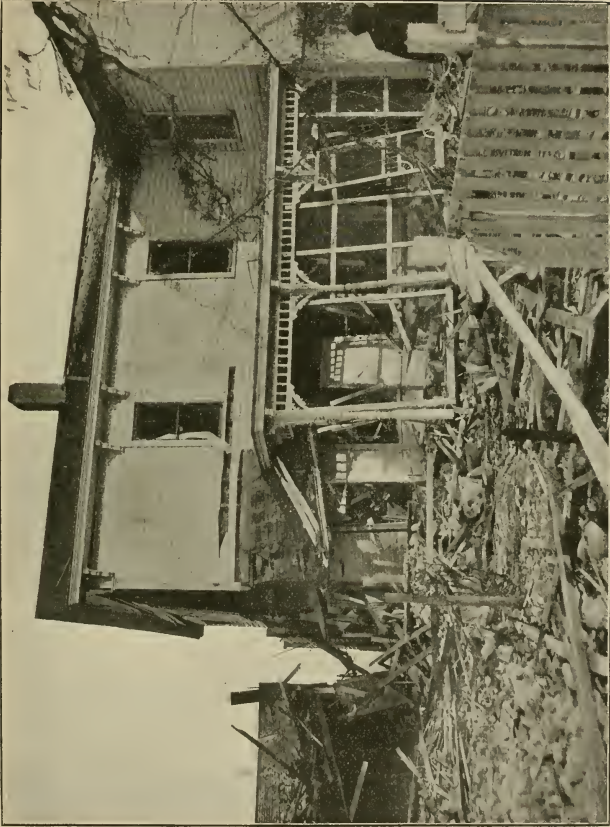
Progress in any endeavor is always attended by changes in method, and, it seems needless therefore to state that the advent of modern motor-driven apparatus is also bringing about variations from former fire-fighting tactics.



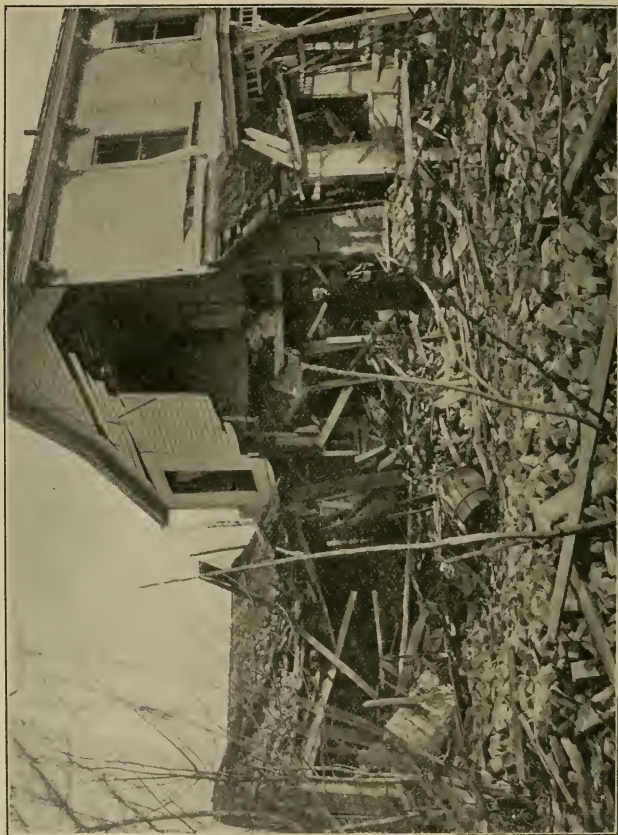
To-day, we are facing a new era, the things that were are passing with the horses, and now, more than ever before, the chief of a fire department must be keenly alive to the advantages which the latest forms of motor apparatus offer in the way of better protection.

It has been well said, that "Speed is the essence of correct fire fighting." To my sense this means, that the scene of a fire should be reached promptly and the fire extinguished quickly while yet in the incipient stage. Surely no one will dispute the superiority of the motor as compared with horses in so far as speed in covering average distances has to do with our problems. This point indeed, is quite foreign to my topic, because the argument which I expect to bring

to your attention, really concerns operations which begin immediately upon approaching the scene of action.



RESIDENCE OF W. D. COLE, PARIS, ILLINOIS, SHOWING RESULTS OF ACETYLENE GAS EXPLOSION.
JANUARY 15, 1916.



ANOTHER VIEW OF THE COLE RESIDENCE, PARIS, ILLINOIS, AFTER THE EXPLOSION.

As the title of my topic indicates, I expect to point out the elements of a method which as yet is not generally known and, referring to the apparatus involved, I may also immediately add that any adverse criticism of the "Booster System," which may have come to your notice, is certainly based upon nothing short of a very complete misconception of the entire scheme of operation.

At the outset, also, permit me to impress upon you the fact, that my remarks will be based entirely upon what I know to be true by personal observation and experience. My purpose will be to make it clear to you why the apparatus commonly styled as the "Booster" carries with it methods of operation which really introduce a better system of putting out a large proportion of such fires as every department is called upon to extinguish.

Motor apparatus equipped with the Booster Pump, is designed to accomplish its purpose upon certain well-defined lines and by conforming to all which is prescribed, I am confident that any fire chief can readily duplicate the splendid success which we have achieved with the Booster in the Rockford Fire Department. It will be my endeavor to acquaint you with all that pertains to this end.

I will begin by first defining the apparatus and as a reply to the question, "What is the Booster?", will state the term refers to a small pump so arranged that the power of the motor may be utilized to produce one or more small but forceful streams through ordinary chemical hose.

In lieu of the conventional chemical apparatus, the car carries a reservoir or tank having a capacity of from 40 to 60 gallons. In my practice the tank is simply filled with ordinary water and an effective stream issues from the chemical hose immediately following the instant the power clutch is thrown to engage the pump.

The streams are under control, because shut-off nozzles are provided and any desired pressure may be maintained. This pressure may be twice as great as ordinarily obtained from a chemical tank or it may be as little as circumstances demand. The advantage here is, that fires may be fought successfully at higher elevations than is possible with the chemical tank. Under more than average conditions I have found the streams using plain water to be just as effective as the jets delivered from soda and acid apparatus and the damage done to property is very much less.

In so far as described, the Booster is in my opinion already the superior of a chemically-equipped hose wagon. The scope of the new apparatus, however, is not limited to merely discharging the contents of the tank. If properly handled there need be no interruption of the work when once begun. If the $2\frac{1}{2}$ -inch hose has been brought up from a hydrant the procedure is to connect the line with the Booster Pump. This connection can be established and the hydrant turned on long before the initial supply from the tank is exhausted with the result, that the work thus commenced, may be continued with even greater effect than before without interruption from any cause.

To those, who might feel disposed to say that this same thing is possible by using the "by-pass" equipment of the ordinary chemical apparatus, let me state, as a reminder that the "by-pass" method is of

no avail when hydrant pressures are low and that in rare instances only are hydrant pressures high enough to compete with the possibilities of the Booster Pump.

In connection with other equipment it is feasible to carry a small suction hose. It has been my experience that the use of this suction enabled us to do effective work with the Booster Pump in situations and under conditions when the older form of combination hose and chemical apparatus would be of little or no avail. In remote districts beyond the zone of our water mains excellent execution has been done on more than one occasion by drafting from a cistern on the premises which furnished the only available water supply.

Under circumstances somewhat similar good work has also been done by simply feeding water into the Booster tank from pails while the pump is engaged. Every drop of water thus poured into the tank is whisked up quickly by the pump and dispatched on its mission through the chemical hose and on to the fire.

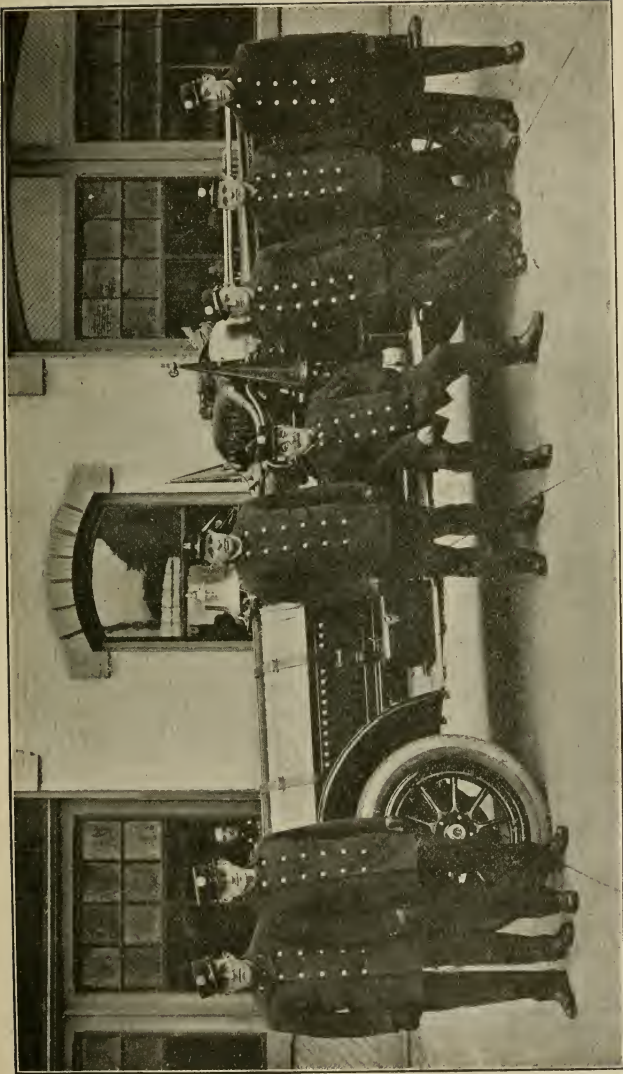
While it is possible to add chemicals in solution and use such mixture with the Booster, our practice in Rockford is to rely on water alone. In my opinion the value of the chemical extinguisher has been largely overrated. In its time, the horse-drawn combination hose and chemical was all right and the soda and acid process probably furnished the best means for expelling the fluid from the tanks under any considerable pressure. The extinguishing qualities of the chemical is more effective in closed rooms or closets, but for fires in the open and with free access of air or where the gases can get away, I find a small swift jet of clear water just as effective.

With the advent of motor-driven hose wagons the chemical process for expelling the fluid from the tanks is no longer necessary. When you have a power plant standing by and idle after arriving at a fire, why not use it for pumping these small streams? With the force of the "Booster" behind it, clear water will accomplish more than most men now dream of. I claim that water applied in the manner described does better work and with less loss than the chemical. When the "Booster" is once hooked up to a hydrant or some other source of water supply, you can continue work for hours, while with the chemical you are down and out in about six to eight minutes. It is then either a question of recharging which always involves delay or, if you attach a line from a hydrant to the "by-pass," the chances are that the pressure will be insufficient to continue the work with the same satisfaction which the "Booster" affords.

Primarily every fire department must have hose wagons and my argument is this: that when this takes on the form of a motor truck then the apparatus in my opinion is far short of its possibilities unless it is "Booster" equipped.

When fitted in the way just indicated, the apparatus is just as much a hose wagon as it ever could be. We need a $2\frac{1}{2}$ -inch hose at any fire and always want to bring plenty of it upon the ground quickly but if handled properly most of the chances offering will yield to the "Booster."

Once familiar with the practice I have presented to your notice, you will become equally warm advocates of the "Booster" system as others who have learned of its value by actual experience.



SQUAD WAGON AND CREW, ROCKFORD FIRE DEPARTMENT.

LIGHTNING FIRE HAZARD AND ITS ELIMINATION.

[By TERRELL CROFT, Electrical Engineer, Washington University, St. Louis, Mo.]

The annual lightning losses in the United States, so the recently-issued Technologic Paper No. 56 of the Bureau of Standards states (page 10), approximate eight million dollars (\$8,000,000). The probabilities are that this is an extremely conservative estimate, inasmuch as the lightning loss in the State of Illinois alone, for the year 1914, aggregated in round numbers one million dollars (\$1,000,000).

However, regardless of what the exact value may be, it is an accepted fact that those losses are very large.

This is a very regrettable condition of affairs, particularly in view of the fact that this lightning waste could be decreased to practically nothing if all buildings were properly rodged.

It can be shown by statistics compiled from data of fire insurance companies and state fire marshals, that lightning losses, or lightning damage, can be decreased by at least 90 per cent if buildings are equipped with properly designed lightning rod systems. It is altogether possible that lightning losses could be practically eliminated by this means. The bulletin by Prof. W. H. Day, "Lightning Rods, Their Efficiency, Principles, and Installation on Farm Buildings," issued under the direction of the Ontario Agricultural College at Toronto, Ontario, Canada, recites figures which, without any question, verify the above statements. Information in the booklet, "Lightning and Lightning Conductors," by J. Warren Smith, Professor of Meteorology, U. S. Department of Agriculture, Columbus, Ohio, and in the Bureau of Standards Paper No. 56, above referred to, gives a similar verification.

It is, then, doubtless, largely because of ignorance, that the lightning destruction in this country is as great as it is. Although the underlying principles of the lightning rod have been well understood in many quarters since Benjamin Franklin's discovery in 1750, the majority of people do not even now know that lightning rods do actually tend to prevent lightning flashes, and that they do, without any possible question of doubt, very materially decrease and almost eliminate lightning hazard and damage.

How is it that rods decrease lightning loss?

It is obviously impossible to include herein an extended discussion of the theory of the lightning rod. Some statements of fact will be given which can be verified, if the reader so desires, by reference to any one of a number of treatises.

The lightning rod has two important and distinct functions. The first is to prevent lightning flashes. This it does by virtue of the property that metallic points have of discharging or dispersing electricity. It is a readily demonstrated physical fact that an electric charge will not be retained on a metallic body from which a metallic point protrudes. Hence, when the earth-connected lightning conductors on a building are surmounted by points, their tendency is to equalize the difference in electrical potential, or the voltage existing during thunderstorms between the earth and the objects on it below and the cloud in the atmosphere above.

This so-called dispersing action of points can be easily demonstrated in any electrical laboratory where a static electrical machine is available. That it is a factor in the protection of buildings from lightning is evident from the fact that rodded buildings are very seldom struck. (For verifications see the reference enumerated above.)

One of the functions of the lightning conductor and the points on it is, then, to prevent lightning flashes.

The second function is to provide a path of little opposition to earth for the lightning flash current in cases where the above described dispersing action of the points does not prevent the flash. And it should be noted that under certain conditions lightning flashes can not be prevented by the dispersing action of points. If such a path of little opposition is not provided, the lightning flash current will probably follow a route to ground through the wood or masonry of the structure and damage it, or possibly ignite it.

A lightning rod installation is then an arrangement, the operation of which is governed by certain reasonably well-defined physical laws. It follows that the rodding should be arranged with regard to these laws if it is to provide protection.

The methods of installation of lightning conductors which are now generally accepted as being the best ones, are largely the products of experience. Although laboratory tests have had something to do with their determination, field experience has been the more important factor inasmuch as it is impossible to duplicate in the laboratory the complicated and colossal conditions of the actual lightning flash.

It is now possible for one, if he avails himself of the experience that is now available, to install at a reasonable expenditure, a lightning conductor system on an ordinary building, and feel reasonably certain that that building will not suffer lightning damage.

The ideal lightning conductor installation would be one wherein the building is enclosed in a grounded metallic cage, like a bird cage. For example, the heavy wires constituting the bars of the protection cage could be secured to the roof and sides of the building, and connected with the earth at its base. This structure should be surmounted by points.

As was shown by the great English Physicist, Faraday, an electrical disturbance originating without is impossible within a grounded metallic cage such as the one just described. Hence, if a building were encased in such a metallic net, that portion of the structure within the net would be immune from lightning disturbances, it being assumed, of course, that the metal work of the cage would be of sufficiently heavy material.

However, in the practical everyday protection of buildings from lightning it is seldom that the expense involved in the preparation and installation of such a mammoth grounded cage is justifiable. And furthermore, experience has shown that it is possible to obtain almost perfect protection without recourse to such refined methods. If a system of metallic conductors is arranged over a structure so that the system approximates the cage, if it is provided with points for dispersion at its upper extremities and is connected with the ground at the

base of the building, then, so experience has shown, the lightning hazard of that building is practically eliminated. However, a small system of conductors over the exterior surface of a building can not be expected to prevent outside electrical influences from affecting metallic parts within the building. Hence, it is necessary in practical lightning rod installations to connect together to the lightning conductor system and to the earth, the metallic parts within a building to prevent the occurrence of "inductive side flashes." These "side flashes," due to external electrical influences, would not occur inside of a grounded metal cage.

Almost ever since the discovery by Franklin of the lightning-rod principle, there has been a controversy as to whether iron or copper is the best material for a lightning conductor. The truth of the matter is that either iron or copper will make a satisfactory lightning conductor, provided the conductor is, in each case, of sufficient cross-sectional area, that is, big enough to convey a lightning-flash current without melting. So that, from an electrical standpoint, either iron or copper may be used. However, an iron conductor should be bigger than a copper one for the same conditions, because of its greater specific resistance, and hence, tendency for the development of heat in it when an electric current flows through it.

However, as everyone knows, copper is a much more durable material than commercial iron, hence, as a general proposition, iron lightning conductors should be used only for temporary installations. Nevertheless, in certain localities and under certain climatic conditions, iron electrical conductors have been known to last for many years, but under conditions with which almost everyone is familiar, commercial iron or steel, even though it is heavily galvanized, will rust through in a very short time, particularly at the ground line. Copper is always the more durable.

Buying a lightning rod installation is similar to buying insurance. When a man buys life or fire insurance, he always purchases from the concern that is stable, and that will doubtless be in business for many years. He buys from the most substantial concern he can locate, all things being equal, and does not buy from one which he knows will fail or retire from business after a few years.

The same conditions holds with lightning conductors. They constitute a type of insurance, and the best and most reliable that can be obtained is none too good.

Therefore, it is believed that all lightning conductors should be of copper, because this is the most durable metal that can be obtained at reasonable expense. But merely because a conductor is of copper, does not necessarily mean that it will provide, maximum effectiveness. Some of the copper conductors on the market are so flimsy and light that they have little mechanical strength and should not be relied on as a source of protection. Doubtless, heavy iron conductors are superior to such frail copper rodding. The chances are that the iron would last longer than the copper in this case, because of the liability of the light copper wires to mechanical breakage.

Regardless of the material of the lightning conductor, it should have ample mechanical strength to insure against its accidental sever-

ance and then, and still more important, it must be installed intelligently or it may have little protective value.

As to the best shape for the lightning conductor, whether it should be tubular, round, flat, cross shape, or elliptical, it is a fact that a conductor having maximum exposed surface per unit weight of material, has certain slight electrical advantages over a conductor of the same material and having less exposed surface per unit weight. However, it is probable this advantage is so inconsiderable that it may be neglected. In this matter of shape of conductor, the horse-sense feature of mechanical fitness should be the ruling factor as it is in the matter of copper versus iron. The lightning conductor should be of such form or shape that it is mechanically strong, that it can be readily installed and so that it is capable of withstanding reasonable mechanical abuse.

Probably conductors of woven copper cable are used more extensively in the best work than conductors of any other material, because they can be made of great mechanical strength, and can be readily formed to the approximate contour of a building upon which they are to be installed.

There should obviously be as few joints as possible in a lightning-conductor installation. This fact follows from mechanical considerations even if the electrical considerations are disregarded. It is not probable that a well-made joint in a lightning conductor affords an appreciably greater opposition to a lightning flash current than does an equal length of the solid conductor, but wherever a joint is introduced in a lightning conductor, or in anything else for that matter, there is always a chance for trouble. Hence, it is merely playing common-sense policy to maintain the number of joints in a system at the minimum. A joint may be apparently perfect when installed and later develop flaws; or it is altogether possible that the joint may not be a good one when it is installed, even though it appears to be. Regardless of the type of conductor used, the number of joints should be maintained at a minimum.

The question is often asked as to whether or not the lightning conductor should be insulated from the building on which it is installed. The truth of the matter is, probably, that with insulators such as are supplied by the few lightning rod manufacturers who still advocate insulation, it makes little difference one way or the other. Theoretically, it is certainly a fact that the lightning conductor should not be insulated from the building. Practically speaking these diminutive insulators are so small that they are wholly ineffective for the purpose for which they are ostensibly intended.

It is conceded by those who have given the facts careful consideration, that all extensive masses of metal, such as pipes and ventilating ducts, within a structure which is protected by lightning rods, should preferably be metallically connected with the lightning rod system. In view of this, since these metallic members are always in contact with the building, the folly of using insulators on exterior conductors is apparent. The United States Government Bureau of Standards recommends in its Technologic Paper No. 56 (page 102) that all metallic masses within a structure be metallically connected

to the lightning conductors. Hence, inasmuch as these insulators do no good, using them in a lightning conductor installation merely involves unjustified expense.

As suggested above, metallic systems within a structure protected by lightning rods should be metallicaally connected to the lightning conductor system. Such connections will eliminate the possibility of "inductive side flashes." It is due to these "inductive side flashes" that barns and oil tanks sometimes are fired by a lightning flash that occurs possibly several miles distant. If it were commercially feasible to surround each building to be rodged with a grounded metallic cage, then it would not be so necessary to interconnect the interior metal work as described. But since in practice the lightning conductors on a building only approximate the grounded cages, such interconnections are found necessary if the maximum protection possible with a limited expenditure for material, is to be afforded.

As a general rule any metallic masses of considerable extent, such as water pipes, gas pipes, feed troughs, ventilating pipes or the like, that lie within ten feet of the lightning conductor on the exterior of the building, should be connected to that conductor metallicaally.

Where inflammable gases and materials exist, as in oil refineries, around oil tanks, or in cereal mills, it is believed that all metallic masses should be (1) interconnected with one another, (2) grounded below and (3) connected to the lightning conductor system at the highest available point.

The relation of the telephone, the fence wires, and the metal clothes lines running to the building under protection must be considered in their relation to the conductors on the building. Fence wires and clothes-line wires should be grounded at the building.

It is apparent from the foregoing that it is not a simple thing to provide an effective lightning conductor installation on a building. To secure maximum protection with a minimum money expenditure for material, each installation must be carefully considered if the conductors comprising it are to be so routed as to afford the best arrangement. If maximum protection is to be obtained, careful scientific planning is necessary. The matter of the routing of the conductors, and their interconnection with exterior metallic masses is one of the most important features, if not the most important feature, to be encountered. It is more important, in so far as immediate protection is concerned, that the conductors be disposed correctly than it is that a certain material be used for the conductors or that the groundings be perfect.

The following comprise the roster of officers and employees of the State Fire Marshal Department:

SPRINGFIELD OFFICE.

WALTER H. BENNETT, State Fire Marshal.
 F. R. MORGARIDGE, Assistant State Fire Marshal.
 W. S. HOOPES, First Deputy State Fire Marshal.
 MRS. MAE S. JONES, Stenographer.
 MISS MARY A. GORMAN, Stenographer.
 MISS NELLE SUTTON, Statistician.
 ALEX. PERRY, Janitor.

FIELD DEPUTIES.

A. H. BOGARDUS, Springfield.
 TONY BRUCKS, East St. Louis.
 GEORGE J. BYRNES, Springfield.
 PHILIP R. DUNN, Springfield.
 J. E. GALLIVAN, Champaign.
 THOMAS A. GREELY, Chicago.
 ROBERT HARPER, Rock Falls.
 EDWARD HOLLAND, Bloomington.
 S. LEGREID, Centralia.
 R. B. LYTTON, Metropolis.
 L. C. MCMURTRIE, Lacon.
 MATT E. NORTON, Galesburg.
 CHAS. J. ROBERTS, Champaign.
 WILLIAM F. RYAN, Peoria.
 HENRY J. SLOAN, Danville.
 J. Q. SNEDEKER, Marion.
 W. L. BERGER, Geneseo

CHICAGO OFFICE.

A. A. BACH, Chief Deputy State Fire Marshal.
 FRANK L. SALISBURY, Second Deputy State Fire Marshal.
 MISS OLIVE M. WILHITE, Stenographer.
 MISS DELLA ELMER, Stenographer.

DEPUTIES.

MICHAEL E. DALTON, MICHAEL J. DURR, WILLIAM J. HANAFIN, NIELS JUUL, JR.,
 JOHN J. MCKENNA, GEORGE E. O'DONNELL, WILLIAM R. PRICE.

SIXTH ANNUAL REPORT
OF THE
STATE FIRE MARSHAL
OF THE STATE OF
ILLINOIS
FOR THE YEAR
1916



WALTER H. BENNETT
State Fire Marshal



JOST & KIEFER PRINTING CO.
QUINCY, ILLINOIS



WALTER H. BENNETT
State Fire Marshal of Illinois

LETTER OF TRANSMITTAL.

Springfield, Ill., February 1, 1917.

Hon. Rufus M. Potts,
Superintendent of Insurance,
Springfield, Illinois.

My dear Sir:

I have the honor to submit to you herewith, in accordance with section 15 of an Act creating the office of the State Fire Marshal, prescribing his duties, etc., the Sixth annual Report of the State Fire Marshal Department of Illinois, the same covering the operation of that department from January 1, 1916, to December 31, 1916, inclusive.

All of which is respectfully submitted.

WALTER H. BENNETT,
State Fire Marshal.

5617 Directy 4.6, 1916 (407)

AN APPRECIATION.

Mr. Frank R. Morgaridge was appointed Assistant State Fire Marshal of Illinois June 1, 1911, and resigned that position February 1, 1917, to take up special work in the arson department of the National Board of Fire Underwriters. During a year and a half of this time, owing to a vacancy in the office of State Fire Marshal, he was, under the law, the Acting State Fire Marshal of Illinois. To him, who by his earnest zeal and abounding enthusiasm, contributed so generous an amount of success to this Department, and whose untiring efforts in promoting the efficiency of our work in its several branches, broadened our field of influence in the State and Nation, is this the Sixth Annual Report of the State Fire Marshal Department of Illinois, respectively dedicated.

ANNUAL REPORT OF THE STATE FIRE MARSHAL DEPARTMENT OF ILLINOIS.

In the preparation of this annual report we have for convenience, divided it into five parts, namely: Part I.—Department of Education. II.—Department of Inspection. III.—Department Investigation. IV.—The Statistical Record... V.—Fire Losses in Illinois Cities.

COMPARATIVE STATEMENT.

There were reported to the Fire Marshal Department for the year 1916 a total of 15,693 fires, as compared to 12,450 in 1915, an apparent increase of 3,243. This, however, does not represent the true situation. In order to perfect the collection of fire statistics, the Department in the beginning of the year 1916 began the recording of each fire irrespective of the amount of the loss. This embraced a large number of fires with a loss between one dollar (\$1.00) and five dollars (\$5.00), which the Department has never hitherto regarded in the making up of the annual report. This accounts for the apparent increase in both the number of fires in 1916, and the increase in the fire loss.

The total fire loss for the year 1916 amounts to \$13,485,083, as compared to \$11,798,569, an increase in the total fire loss for the entire State of Illinois amounting to \$1,686,514. Again this is not a real increase, but is represented by two factors: (1) It embraces a large number of small fires, aggregating a considerable loss, which we have hitherto disregarded. (2) The value of almost all personal property has so greatly increased in 1916 over previous years, that the burning of a certain amount of given property would greatly increase the property loss. To illustrate:

A stock of groceries was destroyed in 1915 with a property loss of \$1,000. The same stock of groceries if burned in 1916 would cause a property loss of \$1,500. Again, an elevator fire in 1915 producing a loss of \$50,000 in grain would produce a loss of \$100,000 in 1916. So, the tremendous rise in property values and the collection of hitherto unrecognized small fires have produced an apparent increased property loss of perhaps \$3,000,000.

To some extent the same increase in values has applied to

buildings burned. The total loss to buildings in 1916 was \$6,943,446 as compared to \$6,560,366 in 1915, an apparent increase of \$383,080. Our estimated fire loss is usually based upon the judgment of the Fire Chiefs, and where a fire damages a building, he is directed to estimate the loss by the amount of money it would cost to replace the partially burned building. An advance in building materials has likewise increased the total fire loss; that is to say it would require more money to replace the loss on a building in 1916 than in previous years, because of the increased cost in building material. So the increased building loss can more than be accounted for in the increased cost of building material.

The total number of deaths resulting directly from fires during the year 1916 reported to this Department was 275, as compared to 263 for the year 1915, an increase of 12. The largest single contributing cause being clothing ignited from stoves and furnaces causing 76 deaths. Gasoline explosions come next with 52 deaths. Thirty-nine people lost their lives in burning buildings. Thirty-six children were burned to death by having their clothing ignited from bonfires. Thirty people lost their lives from the careless handling of matches and 22 women were burned to death by starting fires with kerosene. Probably 90% of the total deaths in Illinois last year resulted directly from some form of carelessness.

The largest single contributing cause of fires in 1916 was lightning. Seven hundred and five of these fires produced a property loss of \$886,977.

Sparks arising from combustion caused 1,861 fires with a property loss of \$872,366.

Defective flues and chimneys were responsible for 1,440 fires causing a total loss of \$795,170.

Overheated stoves and furnaces caused 1,131 fires with a property loss of \$624,404.

Explosions of one kind and another caused 201 fires with a property loss of \$587,856.

Defective electrical wiring was responsible for 440 fires with a property loss of \$572,479.

Spontaneous Combustion caused 491 fires producing a property loss of \$547,711.

A large number of fires were not confined to the building in which they originated. Last year 1,241 such fires escaping from the building in which they started, caused a property loss of \$1,068,726.

The crime of incendiarism has not been entirely eradicated in

the State of Illinois. In 1916 there were 420 such fires reported, causing a property loss of \$532,121.

For the purpose of comparison the following table showing the fire losses for 1913, 1914, 1915 and 1916, in each of those cities of 15,000 or over population, is shown:

Cities	1913	1914	1915	1916
Chicago	\$5,600,000	\$4,567,495	\$3,246,020	\$4,023,690
Peoria	407,987	356,657	270,312	596,012
Springfield	276,136	108,359	388,328	163,741
East St. Louis	637,540	440,443	201,684	476,951
Rockford	59,464	17,784	26,938	41,931
Quincy	504,000	97,536	86,502	42,079
Joliet	11,557	23,902	254,134	32,972
Aurora	51,973	30,306	97,416	7,633
Decatur	65,000	626,129	164,010	63,457
Danville	82,000	79,879	213,494	34,389
Evanston	24,000	68,751	26,786	88,127
Bloomington	26,177	19,056	17,259	8,966
Oak Park	31,041	64,390	21,973	113,313
Galesburg	43,250	64,067	39,471	32,000
Elgin	45,000	24,100	9,567	19,668
Belleville	32,000	16,000	23,054	9,510
Moline	35,000	23,658	15,237	16,456
Rock Island	342,000	30,206	42,798	28,379
Freeport	53,808	8,609	14,763	19,567
Alton	67,000	59,285	57,140	33,866
Waukegan	18,000	21,000	62,500	23,240
Champaign	47,338	31,395	356,292	60,825
Jacksonville	50,000	67,641	20,418	18,112
Chicago Heights....	26,200	17,450	23,460	32,382
Streator	19,621	14,778	18,400	16,468
Kankakee	10,490	6,745	23,804	57,939

REAL CONSERVATION.

The conservation of human life is the noblest work of man. Next in importance is the conservation of our property assets from destruction by fire. Every agency directed along these avenues of activity should receive the loyal and constant support of every citizen of Illinois.

There is entirely too much death and devastation in this State traceable to the carelessness and negligence of our people. We warn the people of Illinois of their danger, and call upon them for an enlarged vision in order that this Commonwealth may set before America an example of conservation greatly needed and long delayed.

As we review the work of fire prevention in Illinois for the past year we are naturally confronted with the inquiry: What has been accomplished? Are we getting results? Withal, does it pay?

The earnest attention of the reader is directed to the following pages for the answer to these questions.

PART I.

DEPARTMENT OF EDUCATION.

In nearly two-thirds of the States of the Union, the legislatures have enacted laws requiring some study of fire prevention in the schools, and although we have no such laws in this State, it is our earnest desire that the teachers throughout the State shall give to this subject some of the attention which it deserves in an effort to instruct the children in the simpler means of fire prevention, because most of our fires are caused by either ignorance or carelessness.

DEPARTMENT OF EDUCATION.

The work of the Illinois Fire Marshal Department is separated into three divisions, viz: The Department of Education, the Department of Inspection and the Department of Investigation.

The Department of Investigation has charge of the investigation of fires reported to the Department as being of incendiary origin. This department makes a thorough investigation of such fires, and when the fact is established that the fire is not of accidental origin, and evidence is developed fixing the responsibility for the fire, this evidence is turned over to the State's Attorney of the county in which the fire occurs. It has prepared for distribution forms of indictments covering arson, burning to defraud, burning of personal property, conspiracy, confidence game, etc. It has also prepared sets of instructions covering each of these crimes, which the Department is always willing and anxious to send to State's Attorneys having to do with the prosecution of these offences.

The Department of Inspection has charge of the survey and inspection of buildings and premises over the State of Illinois in an effort to reduce the fire hazard. This department has prepared and is distributing to the cities of the State sets of model fire prevention ordinances, proposed building codes, etc. The officials of any city, town or village, interested in the adoption of ordinances tending to reduce the fire hazard are solicited hereby to write to us for model ordinances covering storage of gasoline, sale and discharge of fire works, installation of fire escapes, the organization of fire departments, the establishments of fire limits, the regulation of building construction, etc., etc.

The Department of Education has for its object the spreading of the gospel of fire prevention to the people of the State, in an effort to make them realize that approximately 75 per cent of the fire loss of the State is the result of carelessness and can be eliminated by the observance of proper care and caution.

Deaths by fire in the State of Illinois have been reduced in the last five years from over 500 to approximately half that number, and yet a large per cent of the accidental deaths by fire result from gross carelessness or neglect.

The department of education has sent out to the cities, towns

and villages of the State, during the past year, twenty-four general bulletins dealing with all phases of fire prevention questions. These general bulletins deal with fire escapes, the electrical hazard, spontaneous combustion, incendiary fires, pyromania, storage of gasoline, explosives, lightning, personal liability, and other topics closely identified with the fire prevention propaganda. One purpose of this department is to show the people of the State that fire losses are not paid by the insurance companies, but by the people at large, in either direct or indirect taxation. Every citizen carrying fire insurance certainly pays his proportionate share of every fire loss in the State of Illinois. Even those citizens who do not carry fire insurance help to pay this enormous burden on the citizenship by the increased cost of production of the various articles of trade, due to the fire insurance carried thereon.

It is now conceded that fire insurance is a business necessity. That is to say, that the people as a whole throughout the entire United States are entitled to the protection provided for this purpose; that it is a matter which is not subject to local and restricted laws or averages; that, inasmuch as it is a public business, the cost thereof cannot be measured by the average in any one village, town, city, county or state.

To illustrate, the fire loss per capita in some of the principal cities of Illinois last year was as follows:

Aurora	\$.22
Bloomington .....	.25
Rockford .....	.79
Joliet .....	.82
Freeport .....	.89
Danville .....	.98
Streator	1.03
Quincy	1.05
Alton	1.44
Decatur	1.55
Chicago	1.68
Springfield	2.60
Evanston	2.75
Oak Park	3.24
Peoria	5.96
East St. Louis	5.96

If the insurance cost was to be based upon the fire loss of Peoria or East St. Louis it would be outrageously high, and if, on

the other hand, the cost should be based upon the fire loss of Aurora or Bloomington, it would be entirely too low.

This element of loss is analyzed by causes. Thus we find that defective flues and chimneys during the year 1916 caused 1440 fires, and a loss of \$795,170 of the property assets of the State; that the careless handling of matches caused 1,205 fires and a property loss of nearly a Half Million Dollars; there were 705 lightning fires in the State last year, which caused a loss of \$886,977. Practically all of these losses occurred on buildings not provided with lightning rods, and we are thus forced to the conclusion that most of these losses are preventable. Flying sparks on shingle roofs, etc., caused 2,000 fires and a loss of nearly a Half Million Dollars; defective stoves, furnaces, etc., caused 1,131 fires, and a property loss of \$624,404.

It is from these and similar causes that we arrive at the conclusion that the larger portion of this total fire waste is preventable and is directly chargeable to the carelessness of the people. It therefore must follow that any material reduction in insurance rates and cost must be preceded by a material reduction of the fire loss, which is in the hands of the people themselves. This Department is indeed glad to note that the fire loss is decreasing in Illinois and that we will soon be entitled to the logical result of this fact.

THE TEACHING OF FIRE PREVENTION IN THE SCHOOLS.

The State Fire Marshal of Illinois believes in the spirit of modern education, an education that will train the hand, the head and the heart, that will teach character as well as culture, courtesy as well as courage.

This Department believes it is just as important to give the boy a key to life as it is to give him a key to Latin, and just as important that he receive instruction on the great questions that confront the people of today as it is to instruct him on the problems of a thousand years ago.

The elimination of the fire waste is without question the greatest conservation question before the people of this country, and realizing that fact, the schools of the State have been enlisted in this fire prevention campaign. More than 100 school meetings were held in the State during the year 1916, at which time a fire prevention address was made by some member connected with the Department to the pupils of the schools of the larger cities. This school lecture is illustrated by picture slides and two reels of motion pictures, one

of which is entitled "The Lesson of the Flames", and the other "The Crime of Carelessness". In this connection we wish to state that the Fire Marshal Department has received no more earnest co-operation and support from any class of citizens of the State than has been given by the school teachers and school officials of the State.

THIS ILLUSTRATED LECTURE ON FIRE PREVENTION WILL BE FURNISHED BY THIS DEPARTMENT TO ANY SCHOOL IN THE STATE, WITHOUT EXPENSE TO THE LOCAL OFFICIALS, ON RECEIPT OF AN INVITATION FROM THE PRINCIPAL, SUPERINTENDENT, OR OTHER SCHOOL OFFICER IN CHARGE.

Another feature of this educational work was taken up in connection with the County School Institutes, and during the summer months, on receipt of invitations from the various County Superintendents, illustrated fire prevention lectures were given at these institutes to the teachers of the particular County in which the meeting was held.

Working in conjunction with the Inspection Department, the Department of Education delivered illustrated lectures at public meetings in each of the cities in which general inspections and surveys were held during the past year. This matter is covered more comprehensively in the report of the Department of Inspection.

The Department of Education during the past year continued to send out to interested teachers of the State supplies of the Fire Prevention School Reader, a ninety-six page text book dealing with all phases of fire prevention work, which was prepared late in the year 1915.

This supply of school readers is now exhausted, and it is the purpose of the Department to re-edit this book at an early date.

The teaching of fire prevention in schools may be casting our bread upon the waters. If so, the Department is a firm believer that it will return after many days. We cannot hope to immediately reap a large measure of success along this line of endeavor. And yet lessons of thrift, carefulness and good order, inculcated in the minds of the school children, are bound to bring results. It is here that we find the mind open to every avenue of information. The lessons of fire prevention now being taught to the school children of this country present to the child a new avenue of information, and the child responds more quickly, in putting into execution these ideas, than does the mature mind.

As a concrete example of the direct and instant benefit resulting from teaching fire prevention in schools, the following incident is

to be noted, happening in the little city of Galena away up in the northwest part of the state. It is famous as the home of General Grant. It must be that some of the spirit of that illustrious General still pervades the atmosphere of that town.

A family by the name of Edwards lives there, consisting of a father, mother and three little children. The oldest boy, Sherman Edwards, is seven years old. The youngest, also a boy, is two and one-half years old. The mother of this household had occasion to run across the street to a neighbor's house just for a few moments. While she was away the little two and one-half year old boy, in a manner unknown, got possession of some matches and in playing with them ignited his clothing. In an instant he was a mass of flames. He started running and screaming toward the door. The oldest boy, Sherman, grabbed a rug from the floor, threw it around his little brother rolled him over and over on the floor, extinguished the fire and saved his life. A delay of thirty seconds would have meant death to this little boy.

Upon inquiring into the facts it was found that a few months previous an accident occurred in a restaurant in that town where a woman was burned to death by having her clothing ignited from a gasoline stove. Taking this accident as a text, the teacher of one of the primary grades, where the boy Sherman attended school, read a lesson from our Fire Prevention School Reader, and explained to her little boys and girls what to do. He was ready and willing to do it and thus saved his little brother's life. Is not this sort of work worth while? Was not that teacher amply repaid for the few minutes spent in instructing her little charges on the dangers of fire?

In the school where that boy learned how to act in an emergency, lessons are provided on the origin of fires, the chemistry of fire, matches, gasoline, kerosene, sparks from flues, lightning, spontaneous combustion, defective chimneys, Christmas tree fires, and other kindred subjects covering the whole range of dangers and means of prevention. We know that a large measure of results in protecting the lives of the people and the curtailment of property loss will ultimately follow the teaching of fire prevention in schools.

CO-OPERATION OF THE STATE FIRE MARSHAL DEPARTMENT WITH THE PUBLIC SCHOOLS.



D. WALTER POTTS

The State Fire Marshal and his Deputies rendered a great service to the people of East St. Louis during the week beginning Monday, June 5, 1916. Several days prior to this date a Deputy from the Fire Marshal Department came to East St. Louis and completed arrangements to have the State Fire Marshal and some of his Deputies come to East St. Louis, inspect the school buildings, and deliver a number of lectures to the students in our schools.

On Monday morning, June 5th, 1916, State Fire Marshal Walter H. Bennett and a number of his Deputies arrived according to schedule, and the preparations which had been made, enabled the work to be done with accuracy and dispatch.

These men in company with our local Fire Chief, Mr. M. J. Tobin, inspected the entire business section of the city. They also visited many schools in the city and observed the fire drills, which are conducted in two-story buildings a minimum of once each month and in three story buildings a minimum of twice each month.

A Special Inspector went over the conditions existing in each school building and made and forwarded to the Board of Education a complete and comprehensive report which recommended alterations and improvements in some of the school buildings.

A thorough investigation was made of each school in the city and the presence of these men, together with the advice given to

principals, teachers and janitors emphasized a subject, interest in which is never allowed to wane in the operation of our schools.

The illustrated lectures were highly appreciated by the principals, teachers and pupils, and the facts recited, with the admonitions given brought the necessity for exercising the greatest precautions to prevent fires, forcibly before the people of the city.

Another point worthy of emphasis is that while our schools in the teaching of civics enumerate the various facilities of the State of Illinois for rendering assistance along many lines, yet the actual presence of real, live men from one of the Departments served to inject interest, not only in this particular Department, but in all other Departments of State. This point we wish to emphasize for it means much to school children to come in contact with officers of the State who are daily concerned about the welfare of the people of the State. A higher appreciation of the State, its organization, and the work it is accomplishing was a bi-product, resulting from the time spent in East St. Louis by the State Fire Marshal and his Deputies.

One evening a mass meeting was held in the City Hall, where the illustrated lectures were given to the fathers and mothers of the children in our schools. These lectures clarified what the pupils had reported in the homes, after seeing the pictures and hearing the lectures in the various schools.

We wish in this connection to express our appreciation of the character and ability of the men who made these inspections, delivered the lectures, etc. They were efficient, courteous and tactful. With men of this caliber visiting the cities throughout the State, knowing how to meet and address audiences, conduct investigations in an efficient manner, the respect for the State Fire Marshal Department will increase and the fire loss will diminish.

(Signed) D. WALTER POTTS,
Superintendent of Schools.

East St. Louis, Illinois.
February 1, 1917.

SCHOOL BUILDINGS AND THE FIRE HAZARD.

Fire Prevention and Public Safety in School Buildings.



E. W. DAY

The question of fire prevention and public safety in school buildings is an old one; much has been said and written on the subject, but in spite of this we are often prone to O. K. a school to members of a school board on the basis that rubbish is well cared for and that there are two means of egress from the building, and without giving due regard to the basic principles involved. That these basic principles constitute the foundation of safety is amply attested by the lengthy attention given them by the National Fire Protection Association at their last annual meeting in Chicago last year.

Now to assure a school board that their buildings are safe without a thorough investigation and application of

these basic principles is to assume a responsibility which perhaps many of us would be unwilling to shoulder on second thought. Naturally, in a paper of this length we cannot cover this broad subject fully, but we can get at the skeleton of the structure and upon this skeleton, we can build up our estimate of any particular school.

During the past year I have examined probably a hundred and fifty school buildings, and granting certain exceptions, they leave much to be desired. The majority of these buildings are located in Illinois, and the most remarkable feature is the duplication of identical defects in school after school. Perhaps I can make myself clear by taking you through one of these buildings with me.

Starting our inspection in the attic we usually find this to be from twenty to thirty feet in height, open finish and of highly combustible construction with no means of ventilation other than a few small windows near the floor. As often as not the attic can be reached only through a scuttle hole and no permanent ladder is present, so to begin with a fire in the attic is inaccessible. As foul air exhausts are usually terminated in the attic, instead of being carried out through the roof, as attics are frequently used for the storage of desks, decorations, lumber and other inflammable materials, and as the wiring is usually run along the tops of the floor joists and otherwise subject to mechanical injury, there is sufficient fire hazard involved to warrant attention. The best structural aid which can be employed in connection with such attic spaces are "Fire Stops". These stops are constructed of metal lath and plaster or tile and openings through same are protected by standard automatic fire doors, although often there are interior brick walls present which can be employed for this purpose. One such stop should be present in every attic of this type, and an additional one should be constructed for each additional 5,000 square feet of area.

Other than sprinklers a standpipe is the only device which offers any reasonable aid for an attic fire of this sort, but school boards have some keen ideas as to standpipe installation, 2½ inch hose on 1½ risers are not uncommon, while 2 inch seems the usual size for risers. Two and one-half inch hose has no place inside of a school building; 4 inch risers should be employed except in rare instances and 1½ inch unlined linen hose on self-releasing racks and with ⅝ inch smooth brass nozzles should constitute the protection.

Descending to the second floor we frequently find an assembly hall. The doors to the hallway from this hall are usually double doors with bolts on the inactive sides and if there is a fire escape it is invariably accessible through ordinary windows, the sills of which are from two to four feet above the floor. The fact that the doors from the hall are "supposed" to be unbolted during the use of the hall hardly guarantees the safety of those assembled and the extent of dependence which can be placed in a fire escape as they are usually arranged, with window sills at waist height and exposed by thin glass on the floors below is quite problematical. Yet many school boards believe that if they erect a fire escape, they have provided the acme of safety and no further precautions need be taken. As far as exit doors go, both from assembly rooms and from the building, approved panic bars are the only guarantee of instantly available and full width exit.

The question of outside escape is somewhat involved but briefly the most desirable means of egress is the horizontal exit where the children can be marched from one section of a building through a standard fire wall to another section, but very few school buildings which I have seen are adaptable by construction to this plan. Standard fire towers are also positive in the security which they afford, but their use in schools is infrequent. Stairways enclosed in tile, wire glass or other suitable material with proper doors are also much favored, but little used. As I find that school boards are practically unanimous in their refusal to undertake structural alterations within a building, I have been recommending, where additional means of egress is necessary, the installation of an outside stairway. This stair should not be over four feet in width and the first run of the stair should be away from the building. Every twelve feet of drop the direction of travel should be changed; this is to prevent any increase of speed on the part of the pupils descending the stair. Proper handrails should be provided and the balcony of the stair should be accessible through a door opening outward and equipped with a panic bar. The width of the treads and the height of the risers should be identical with those of the inside stairs. Naturally this escape should be constructed in a substantial way and of incombustible material, and the stairs should have a slight pitch for draining purposes. If the door to this stair is from a class room the door to this class room should be double acting in its operation, as it is in a direct line of travel between two distinct means of egress, and a Fire Escape sign should be posted over this door.

School stairways are invariably bad; it seems to be the opinion of most architects that the wider they make the stairs the safer the stairs will be. As a matter of fact, no school stairway should exceed 44 inches in width, unless it is of sufficient width to be divided into two equal runs of that width by intermediate handrails and newel posts. The inside handrail is usually missing and the outside rail is often of such width as to defeat the purpose for which it was installed. When a stair is much in excess of the proper width it permits the third child to get in between the two lines of the fire drill and the best devised fire drill in existence is, under such conditions, liable to break down in the event of an actual fire with rows of tense children on a smoke cushioned stairway.

School basements usually afford opportunity for considerable criticism. Here we have the boiler room, coal room, fan room and often a manual training room and domestic science class. The

boilers are usually located under a combustible ceiling and immediately under a class room floor and the clearance of the unprotected metal breeching is as a rule much less than the specified clearance of 24 inches for low pressure boilers and 36 inches for high pressure. The boiler room is frequently cut off by a brick wall but with direct communications to the remaining basement area. Boiler rooms should be in a detached or adjoining section with no communication to the building, but the only remedy for existing schools where the boilers are already in the building is to fireproof the boiler room ceiling and cut off all communications with standard automatic fire doors.

Soft coal is stored in basements in quantities of from twenty-five to seventy-five tons, although soft coal in excess of 15 tons is, under favorable conditions, subject to spontaneous ignition. I encountered a case of combustion last summer in a school in this State. Yet when we ask a school board to provide an incombustible room for the storage of coal, they demur on the basis of expense.

Manual training rooms are worth some close attention on the question of oil and rubbish storage, gasoline, etc., and domestic science rooms usually have flexible gas tubes on their gas plates instead of rigid metallic connections, although the dangers of flexible tubes ought to be pretty familiar by now. The clearance of steam pipes, care of sweeping compounds, oil mops and accumulations of and manner of disposal of rubbish and sweepings should also be looked into.

The organization of fire drills depends a good deal upon local conditions and need not be discussed; a too complicated form of drill should, however, be guarded against. Fire alarms are usually sounded by means of mechanical gongs; the only fault I have to find with them being that the gong is located on one floor only, instead of being connected with a vertical rod so that an alarm may be sounded from any floor.

The question of portable fire apparatus seems as yet to be more or less of an open one, some favoring the soda and acid type of extinguisher, and some the quart type. I believe that some soda and acid extinguishers are desirable in a school building, but not on the class room floors; a woman teacher or a fourteen year-old pupil can hardly be expected to handle a device weighing thirty-five pounds or more. In the installation of quart type extinguishers, care should be given in their selection, and only those of proven worth installed. In this connection the United States Government, Department of Commerce, Bureau of Standards states: "Care should be exercised

in the selection of extinguishers employing special non-conducting liquids, those operated by liquid pumps having apparently proven more reliable in practice than those depending in any way on air pressure."

In conclusion, I would like to say that the purpose of this paper has been to give a foundation upon which we can all work in the interest of safeguarding the school children in the State of Illinois. I am satisfied from personal observation that much remains to be done despite the complacency of many good gentlemen who call us alarmists and point with pride to their school buildings—which do look fine from the outside. If there had been less complacency and more alarm in the past, perhaps we should not now have to look back upon the unenviable record of one school a day destroyed by fire, or recall those sad days at Collinwood and Peabody. There is a story that runs to the effect that in a certain town there was a high cliff with a road running near the edge and many people had fallen over this cliff and had been killed or injured and the town council became upset and decided upon some drastic action. When the council met it was found that they were divided into two camps, one side wanted to build a fence on the outside edge of that dangerous road, and the other side wanted to buy a modern ambulance to station at the foot of the cliff to carry off the victims. Let us all saw wood this year and help to build that fence, although I suppose we ought to make it a brick fence at that.

(Signed) E. W. DAY,
Fire Prevention Engineer, Chicago.

February 1, 1917.

FARMERS INSTITUTE MEETINGS.

Farmers of the State Interested in Fire Prevention.

The State Fire Marshal Department during 1916 received requests from a number of Counties of the State for speakers to address the County Farmers' Institute on the subject of fire prevention.

It was impossible for the Department to supply sufficient speakers to accept all of these requests, but a great many successful meetings were held and the farmers are showing a keen interest in the conservation of the property of the State.

We are especially pleased at the interest shown by the State Farmers Institute in the work of this Department, realizing the wonderful influence that body has in the creation of public sentiment for any worthy cause.

The Fire Marshal Department is ready and willing to furnish speakers for any Farmers' Institute meetings in this State, without expense to the Institute or the local community. These lectures, however, are much more interesting and instructive when illustrated by the picture slides and motion picture reels than when given without them. We find it difficult to be successful in showing these pictures in many buildings during the day time, owing to the fact that it is impossible to darken them sufficiently, and for that reason, prefer night meetings to those held during the day.

THE DEPARTMENT SLOGAN.

For a number of years the doctrine of SAFETY FIRST has received considerable attention from different agencies dealing with the public. We believe that SAFETY FIRST is the result of individual EFFICIENCY, and instead of prominently identifying SAFETY FIRST with human activity we should emphasize the thing that will bring this about and that is EFFICIENCY. With this in view the Fire Marshal Department of Illinois has adopted the following slogan, which is being placed before the public in all of our educational work:



Seventy-five per cent of the Fire Loss in Illinois, amounting to a Million Dollars a month, is caused by your carelessness and negligence, Mister Citizen—LACK OF EFFICIENCY.

FIRE ESCAPES.

The Department of Inspection has made a broad campaign over the State during the past year for the construction of fire escapes on all buildings covered by the Fire Escape Act, and in connection with that work the Department of Education has prepared and sent out bulletins on fire escapes, and other literature pertaining to the Fire Escape Act.

A short digest of the fire escape Act is reproduced in connection with this article.

The attention of property owners of the State is hereby directed to their personal liability in case an accident should occur in any building not provided with a fire escape or not provided with sufficient fire escapes when such building comes under the provisions of that act.

In the case of *Arms vs. Ayer*, 192 Ill. 601, the Court held the fire escape Act constitutional, and said that the duty of equipping buildings with fire escapes rests primarily upon the owner of the building, and this duty and the liability consequent upon its non-performance is not dependent upon the serving of a notice on the owner to erect such fire escape.

In the case of *Landgraf vs. Kuh*, 188 Ill. 484, the Court said that the owner of the building is not relieved from liability under the fire escape Act because the building is in possession of tenants; nor is the owner relieved by having one or more fire escapes if there are a greater number of people (50 for each fire escape) above the second floor. If the fire escape or exit facilities are in any way obstructed by the tenant, this will render the tenant also liable.

In the case of *Cowen vs. Storey & Clark Piano Company*, 170 Ill. App. 92, the Court held that if a person is lawfully upon the premises of another and is injured in consequence of the failure to provide fire escapes, such person may recover. There was one fire escape on this building. About forty or fifty people were at lunch in the restaurant on the second floor when the fire broke out. The people crowded to the rear of the building and many of them used the fire escape for getting out, but the plaintiff being partially overcome by smoke was assisted to one of the windows from which she was pushed or fell to the ground and was injured.

The Court also held that while it was primarily the duty of the

owner of the building to erect a fire escape, yet under the statute the lessee or tenant was also liable if he controlled the entire building and is subjected to the penalty if he fails to erect suitable fire escape. In this case, the plaintiff on being injured recovered a judgment of \$2,800 against the tenant for such injury and the Court upheld the judgment.

In the case of *Lichtenstein vs. Fish Furniture Co.*, 272 Ill. 191, the Court held that the mere construction of a fire escape "pursuant to the statute" does not relieve the owner of the building from further responsibility to his employees, nor does it establish the fact that the fire escape is a reasonable and sufficient means of escape. And it is the duty of the owner not only to provide a sufficient and reasonable means of escape for employees in case of fire, but it is also his duty to avoid so obstructing the means of escape that it cannot be used when a fire occurs. It was also held in this case that neither a freight elevator nor a stairway in a factory, mercantile establishment, mill or workshop can be regarded as a means of escape in case of fire within the contemplation of the Act, as both are means of spreading fire.

In the case of *Hunt vs. Fish Furniture Co.*, 187 Ill. App. 326, the Court held that if passageways to the fire escapes are obstructed, that the occupant of the building is liable in damages for accident or deaths thereby resulting in case of fire; and also if the owner or occupant fails to comply with the State Statutes or city ordinances in regard to fire escapes, he will be liable. And in this case a verdict for \$2,500 damages was upheld as reasonable under the facts stated.

GENERAL BULLETINS.

For the purpose of conveying general information to the people of the State relative to certain special fire hazards, a number of general bulletins were issued during the year 1916 and distributed in large numbers. A few of these bulletins are here reproduced in order to show the general character of the work along this line.

GENERAL BULLETIN NO. 9—1916.

Digest of Fire Escape Act.

(Chapter 55 A, Hurd's Revised Statutes.)

BUILDINGS TO WHICH ACT IS APPLICABLE.

(a) To all buildings, four or more stories in height, except private residences, and including flats and apartment buildings.

(b) To all buildings more than two stories in height used for

- (1) Manufacturing purpose. (2) Hotels. (3) Dormitories.
(4) Schools. (5) Seminaries. (6) Hospitals. (7) Asylums.

(c) To all public halls providing seating capacity above the first or ground floor.

FIRE ESCAPES.

(a) Construction and attachment. Metallic ladder or stair fire escape, attached to the outer walls of the building, extending from, or near the ground, to the upper story.

(b) Platforms: Must be of adequate dimensions, and at windows so as to be easy of access.

(c) Number to be provided: (1) In cities, villages and towns the authorities prescribe the number. (2) Outside of cities, villages and towns the County Board prescribes the number. (3) In buildings more than two stories high, used for manufacturing purposes, hotels, dormitories, schools, seminaries, hospitals, or asylums, there shall be one fire escape for every 50 persons for which working, sleeping or living accommodations are provided above the second floor.

ENFORCEMENT OF ACT.

Notice shall be served by the Sheriff, at the direction of the County Board or authorities of cities, villages and towns, commanding the installation, within thirty days after service of notice, of fire escapes where not provided.

The Circuit Court may, upon report of a grand jury finding that buildings are not provided with fire escapes, cause the Sheriff to serve notice upon the proper parties.

Any person may, at any time, complain in writing to the County Board, or to the authorities of cities, villages or towns, that fire escapes are (a) needed, or (b) unsafe, or (c) insufficient on the buildings mentioned in the complaint. Inspection of such buildings must then be made by the County Board or corporate authorities.

PENALTY.

Fine of not less than \$25.00 nor more than \$200.00, and further fine of \$50.00 for each additional week of neglect.

WHEN PROVISIONS OF THE ACT DO NOT APPLY.

The provisions of this Act shall not be applicable to cities, villages and towns that have ordinances governing the construction of fire escapes.

HOTEL FIRE ESCAPES.

HOTELS TO WHICH ACT IS APPLICABLE.

Every building having ten or more rooms for guests shall be defined as a hotel under this Act.

FIRE ESCAPES.

(a) Construction and attachment: Every hotel three or more stories high shall have an iron stairway not less than two feet wide, constructed at an angle of 45 degrees, reaching to within 8 feet of the ground, with iron hand rail on both sides.

(b) Platforms: Landings at least 6 feet long and 3 feet wide, with a 3-foot iron railing, must be constructed at each floor above the first.

(c) Iron ladders: Instead of the stairway, an iron ladder may be constructed on the outside of the platform, at least 3 feet from the building.

PENALTY FOR FAILURE TO PROVIDE FIRE ESCAPES.

Fine of not less than \$25.00 nor more than \$100.00, and a further fine of \$50.00 for each additional week of neglect.

ROPE LADDER IN EACH ROOM.

Every room on and above the second floor shall be provided with a $\frac{5}{8}$ -inch rope, securely attached, with knots fifteen inches apart, capable of sustaining 500 pounds, which must reach to the ground. An automatic rope fire escape may be used instead of the knotted rope. These sections do not apply to hotels of fire-proof construction.

PENALTY FOR FAILURE TO PROVIDE ROPE.

Fine of not less than \$10.00 nor more than \$100.00.

POSTING NOTICES IN HOTELS.

Notices shall be posted in each hall and in each room giving directions how to reach the fire escape. Notices shall be placed in each room calling attention to and giving directions for the use of the rope.

COMPLAINT AND PROSECUTION.

Upon complaint of any person the State's Attorneys shall prosecute any person violating the provisions of this Act.

GENERAL BULLETIN NO. 22—1916.

Independence Day Fires.

In the last ten years there have been nearly 2,000 people killed in this country and 40,000 others injured by accidents resulting from careless use of fireworks.

A campaign for a rational and sane celebration of Independence Day began a few years ago, and the results obtained have been so marked as to merit more than a passing notice. A few years ago the celebration of our Fourth of July was attended with so much noise and enthusiasm and resulted in the injury and death of so many children throughout the country, that a national campaign to eliminate much of this loss of life and property was inaugurated by the National Fire Protection Association.

This movement has received the co-operation of the newspapers and business men's associations and patriotic citizens throughout the country to such a marked degree that the deaths and injuries have steadily decreased since 1903.

ILLINOIS LEGISLATURE BARS THE SALE OF TOY PISTOLS IN THIS STATE.

In the State of Illinois, under a law which became effective July 1, 1913, it is a misdemeanor punishable by fine of \$25.00 for any one to trade, sell or give away any toy pistol so made or constructed that it can be used to shoot blank cartridges.

U. S. HEALTH BOARD SEES GRADUAL DECREASE IN DISEASE EACH YEAR.

One of the terrible aftermaths of the accidents which usually occur on July Fourth, caused by blank cartridges, toy cannon, etc., is the great many cases of tetanus, or lock-jaw, which follows these of-times trivial wounds. The United States Public Health Service has taken this matter in hand and has waged a campaign to eliminate this dread disease, and as a result the deaths from tetanus, following Fourth of July celebrations, have been reduced very greatly each year. The Health Department has recently issued a report outlining the result which has been obtained since 1903.

"In 1903," says the report, "there were 417 Fourth of July victims of that dread malady; in 1909 the number had been reduced to 130; while from last year's celebration there were but three. This is life conservation in the true sense of the term. Why not entirely eliminate the disease this year?"

"The blank cartridge wound is the great cause of Fourth of July tetanus. When driven into the tissues the wadding carries with it innumerable bacilli, and the absorption of these poisonous products given off during the growth of these organisms produces the disease.

"The bacilli thrive only in the absence of oxygen. It is for this reason that the physician enlarges the wound and after removing

all foreign material dresses the injury in such a manner that development of the organisms is inhibited. In order to accomplish this it is usually necessary to administer a general anaesthetic. Anti-tetanic serum is of great value as a prophylactic measure, but it should be given soon after the receipt of the injury.

"Parents should realize that Fourth of July tetanus is easy to prevent, but extremely difficult to cure. No blank cartridge wound is too trivial to receive careful medical attention. However slight the injury may appear, summon a physician and at once adopt energetic measures."

BULLETIN NO. 23—1916.

First Aid to the Burned.

HOME TREATMENT FOR LIGHT BURNS AND CARE OF DEEP ONES TILL THE DOCTOR COMES.

More than six thousand people are burned to death every year and many times that number are seriously burned. A burn of the "first degree", as a doctor would say, affects only the external horny layer of the skin, which is composed of minute fishlike scales. Such a burn is red, hot and painfully tender. When the damage is repaired by the formation of a new horny layer the overlying burned surface peels off.

The pain from such a burn can be relieved by excluding the air from it. Cotton or lint wetted in a pint of water to which a teaspoonful of baking soda has been added is an excellent household remedy. If there be no soda at hand, air may be excluded by covering the burned surface with sweet oil. Many mothers use scrapings of raw potatoes; others use flour.

Any burn, even one that only reddens the skin, which involves a large part of the body, is dangerous to life through shock. In such a case a doctor should be sent for. While waiting his arrival the burned area must be protected from the air. Most of the slight but extensive burns are from explosions of gas and gasoline in which the excessive heat is applied only during a flash.

In burns of the second degree there are blisters formed by the pouring out of water from the blood to cool the overheated area. Any clothing over a blistered surface should be removed with great care not to break the blister. A blister should be pricked with a needle point near its margin and the dead skin which formed it should be protected while new skin grows under it.

Burns of this kind should have put on them soft rags or cotton,

dipped in carron oil, which can be had at any drug store, or by cloths smeared with tallow. Over the cloths a bandage should be put.

Burns of the third degree destroy the life in all three of the layers of the skin and sometimes of the flesh beneath. The burned skin is inelastic. Nature gradually separates the dead from the living tissues. Such burns always leave disfiguring scars and if about a joint may permanently impair its movement. While awaiting the arrival of a doctor, such burns should be wrapped with a blanket or the victim put in a bathtub filled with warm water. The not uncommon practice of holding a burnt member near a flame "to draw the fire out of it" is as painful as it is foolish.

WHEN ONE'S CLOTHING IGNITES.

A woman whose clothing has taken fire should seize quickly some woolen or heavy material, wrap it about her and roll on the floor. Nearly always there is in reach a shawl or overcoat or lounge cover or bedding or portiere. This is the most effective method.

A child with clothes ignited will run and scream. The running fans the blaze and the respiration preceding each scream draws the heat of the flame into the lungs. A child or an adult with burning clothing should be wrapped, thrown down and rolled over and over until the fire is extinguished.

BULLETIN NO. 24—1916.

Inspection of Buildings.

Fire Marshal May Order Repair and Removal of Dangerous Conditions.

Under the Fire Marshal law the State Fire Marshal or his deputies or the chief of the fire department or mayor of a city may at any reasonable hour enter any building within their jurisdiction for the purpose of inspecting fire hazard conditions therein, and, where conditions are found especially liable to cause fire or dangerous to persons or property therein in the event fire occurs, such conditions may be ordered removed or remedied.

1. FIRE ESCAPES.—There is a specific state law requiring fire escapes on all four story buildings except private residences; on all public buildings more than two stories in height used for manufacturing purposes, hotels, dormitories, schools, seminaries, hospitals and asylums; and on all two story buildings used as public halls.

2. EXPLOSIVES.—There is a specific statute in this state requiring that no person, firm or company shall store or keep dynamite, nitro-chlorate, or other explosive compound within three hun-

dred yards of an inhabited dwelling, except it be kept within the limits of a city in conformity with existing ordinances governing the storage or keeping of such explosive compound.

3. PUBLIC BUILDINGS.—There is a specific state law which requires that all public buildings which are used for any purpose whereby a collection of people may be assembled together for religious worship, amusement or instruction shall be so constructed that all doors leading from the main hall or principal room and from the building itself shall open outward.

4. VOLATILE OILS.—No specific requirements have been promulgated by the State Fire Marshal Department governing the matter of the storage of gasoline and other volatile oils. The department does, however, recommend such storage in approved underground tanks. The storage of gasoline in open tanks or barrels in store buildings and other buildings in a city is regarded by the State Fire Marshal Department as an especial fire hazard, and its Deputies have been instructed to order such gasoline removed from such buildings wherever found. The storage of gasoline in open tanks and barrels above ground in small buildings removed a reasonable distance from other hazards, while not approved by the department, is not being interfered with.

5. RUBBISH.—Large accumulations of rubbish, excelsior, waste paper, packing boxes, and other combustible material, where found in basements, attics, ware rooms, etc., are regarded as especially dangerous, and are at all times ordered removed.

6. DEFECTIVE ELECTRIC WIRING.—A great deal of hazardous and defective electric wiring is found in the state, especially in small cities and towns not having an Electrical Inspector; Deputy Fire Marshals have been instructed to order changes in electric wiring conditions where such are found dangerous and especially liable to cause fire.

7. MOTION PICTURE THEATRES.—The Fire Marshal Department requires that the booth enclosing the motion picture machine shall be built of fire resistive material and that proper and sufficient exits from the building be provided.

8. FLUES AND CHIMNEYS.—Defective flues and chimneys cause a large per cent of the fire loss in this state. Where the flues on any building are found to be especially dangerous or liable to cause fire, orders are issued by the Fire Marshal Department for either the repair or rebuilding of such flues.

9. DILAPIDATED BUILDINGS.—Many unused and dilap-

idated buildings are found in the business sections of cities in this state. The Fire Marshal Department has not the authority to order these buildings torn down and removed, nor can they be removed without due process of law. The Department has the authority, however, to order such buildings repaired and placed in a safe condition. It frequently is impossible to do this, or is unprofitable and results in the building being torn down and removed.

INSPECTIONS BY MUNICIPALITIES.

As we learned many years ago that eternal vigilance is the price of liberty, so we now learn that eternal and constant inspection of fire hazard conditions is an imperative necessity if the fire waste of Illinois is to be put down any considerable degree.

There is at the present time in existence in this State a trained and equipped army of men ready to serve the people along this line, if the command can only be given to march forward. This army consists of the firemen of Illinois. It is held back from active service in a great fire prevention campaign because the municipalities have not yet seen the larger vision; have not yet realized the greater opportunities in this undeveloped field; have not yet caught the spirit of conservation in their municipal affairs.

When the municipalities of Illinois wake to a realizing sense of their responsibility in this fire waste business, we may expect and will get a larger measure of results than ever hitherto.

PART II.

DEPARTMENT OF INSPECTION.

It is an old maxim that "Fire is a Good Servant, but a Hard Master."



W. SHERMAN HOOPES

First Deputy State Fire Marshal

Appointed Assistant State Fire Marshal February 1, 1917

DEPARTMENT OF INSPECTION.

INSPECTIONS.

As we learned many years ago that eternal vigilance is the price of liberty, so we now learn that eternal and constant inspections of fire hazard conditions is an imperative necessity if the fire waste of this country is to be put down any considerable degree. It is true that there are many Fire Marshal Departments that are handicapped by lack of sufficient force. But it appears that this ought not to deter a Department from entering into this very important field of activity. There is at the present time in existence in this State a trained and equipped army of men ready to serve the people along this line if the command can only be given to march forward. This army consists of the firemen of Illinois and it is held back from active service in a great fire prevention campaign because the State and municipalities have not yet seen the larger vision; have not yet realized the greater opportunities in this undeveloped field.

There is being expended in this country countless millions of good money in the equipment and maintenance of fire departments, and but a few paltry dollars in support of fire prevention methods. The Department feels justified in saying that if one dollar could be expended for fire prevention for every ten dollars that is spent for fire extinguishing, the result in the curtailment of fire waste would be marvelous.

EFFICIENCY THAT IS LACKING.

The inventive genius of mankind has been turned in recent years toward the development and perfection of high class fire fighting machinery—the most efficient which the ingenuity of man can produce. Added to this we have in this State the most expert fire fighters in the world. And with every resource known to modern genius at our command the sum total of the fire loss is not appreciably decreased. How often have we seen the most efficient fire departments imaginable utterly helpless and at the mercy of raging conflagrations that have devastated congested cities, conflagrations that in a day's time have reached into the millions and which might have been prevented by a few dollars spent on fire prevention. Witness: Paris, Texas; Augusta, Georgia, and Nashville, Tennessee. These three cities in one day during the past year contributed more

to the fire loss of this country than an average State contributes in two years.

We are told that there are three methods of learning wisdom: First, by reflection, which is noblest; second, by imitation, which is unworthy; and third, by experience, which is bitterest.

Paris, Augusta, and Nashville all learned by the bitterest method. Let us earnestly hope that hereafter the cities of this State may learn of like perils by the first method of learning wisdom—reflection.

Fire departments with their up-to-the-minute efficiency have been in the habit of directing nearly all of their energies in a curative channel and are only called upon after the disease has broken out in the community.

A SUGGESTED REVOLUTION.

The Department's theory of this question is that the fire departments of this country ought to be revolutionized. That, for every dollar appropriated for fire department expenses, fifty cents should be used for fire prevention work. And following this another, which is that the least qualification a Chief of a fire department should possess is the knowledge of how to direct a stream of water on a fire.

Those who have studied the question are willing to concede that there is no greater agency in America along the line of fire prevention through inspections, than the local fire department, provided it can be brought up to a realization of its great opportunities.

In our State there is a law providing that two per cent of all the insurance premiums collected in a given community shall go toward the maintenance of the fire department of that community. There should be three words added to this law and these three words should be "for inspection purposes".

There is another law which provides that municipalities may set aside a certain sum of money as a pension for the superannuated members of the department. To this law should be added one sentence as follows: "Provided, twenty-five per cent of the annual appropriation of the municipality to the fire department shall have been used for inspection purposes."

Perhaps what would be still better would be a new law which would provide that twenty-five per cent of all money appropriated by any municipality, for the support and maintenance of its fire department, should be used for inspection work.

TRIBUTE MONEY.

For almost a century and a half we, of the United States, have approved the doctrine of "Millions for defense, but not one cent for tribute". At the same time we are sacrificing millions for tribute to the fire fiend and mighty few dollars for defense. The Department would not for one moment depreciate modern machinery, modern appliances and efficient equipment, but we do feel that it is a short-sighted policy which neglects to take advantages of these preventive measures.

The Department realizes full well that there are a few communities that are perhaps years in advance of the times, and have thus early seen and recognized the possibilities of the work. These advanced communities have taken the first step toward the plan here outlined. But there is no department in this State that is measuring up to the full responsibility and full privilege in this matter of fire protection. If our Department might be permitted to make a prophecy it is that in another generation there will be few firemen left in this country. They will have made way for a new order of men who will be doing a different kind of work, and with infinitely different results, and these men will be "Fire Inspectors."

INSPECTION OF CITIES.

State Fire Marshal Department Conducts Campaign to Avoid Fires.

A systematic survey of the fire hazard conditions in Illinois was undertaken by the Fire Marshal Department early in the year 1916. The idea of a state-wide survey of fire conditions under the direction of the State Fire Marshal originated in the Illinois Department, and so far as is known, is the first such plan executed in the United States.

The plan of the survey, which started at the beginning of the year 1916, was to send into every city experts in the matter of preventing fires, men who would know a hazard when they saw one. These men enlisted the support of civic organizations and city councils. They planned parades which included fire engines, police departments, school children and any other units that would make a parade interesting and would focus attention on the main point—fire prevention.

Lectures were given in schools. Public buildings, business buildings and institutions of all kinds were visited and inspected, and reports of the conditions of these places with reference to their

ability to withstand fires, were made. With the help of the fire department each town was thoroughly inspected, and every nook and corner where inflammable material might lodge was overhauled.

The reports made by the Deputy Fire Marshals led in many instances to the eradication of hazardous conditions previously overlooked.

Better protection of life and property in public buildings, such as opera houses, motion picture theaters, public schools, churches and, in fact, every kind of building where people assemble in large numbers, soon resulted in the towns where the survey was made.

Many requests for surveys are being received by the Fire Marshal Department from cities all over the state. The entire state seems to have caught the idea, and cities are intelligently co-operating to obtain the expert assistance which the trained workers of the State Fire Marshal Department can give.

Among the towns and cities visited in 1916 were: Pontiac, Marion, Robinson, Lawrenceville, Mt. Carmel, Carmi, Edwardsville, Collinsville, Chicago Heights, White Hall, Carrollton, Jerseyville, Springfield, East St. Louis, Greenville, Shelbyville, Highland, Sterling, Rock Falls, Dixon, Galena, Mt. Carroll, Savanna, Rock Island, Moline, East Moline, Silvis, Carterville, Danville, Princeton, Ottawa and Kankakee.

DANVILLE CHAMBER OF COMMERCE

Danville, Illinois.

Realizing that no question before our people is of greater importance than that relating to fire prevention, the Danville Chamber of Commerce last fall took up with the State Fire Marshal the matter of coming here and making a fire survey of the city. The work was carried on for three days under the personal direction of Chief of the Inspection Division, W. S. Hoopes, assisted by a corps of deputies.

The business section of the city was divided into blocks, and the thoroughness of the work was apparent at the close of the inspection, when more than 500 inspections showing defects were reported. In more than three hundred cases orders were issued by the deputies for corrections to be made. Many business houses were found where waste had accumulated in closets and unused rooms, and the small number of fires in Danville thus far during the winter is attributed largely to the general inspection and cleaning up which followed the inspection.

Possibly the greatest service rendered was the public school inspection. This disclosed the need of panic bolts on a number of doors, lack of proper fire alarm equipment so that it could be reached from any floor, wooden ceilings over furnaces in a few instances, and in some buildings an accumulation of waste. On the last day of the fire survey Fire Marshal Walter H. Bennett addressed two monster meetings at the Armory. During the afternoon more than a thousand school children made up the audience, and at the evening meeting the business men, manufacturers and general public heard the lecture and saw the motion pictures and stereopticon slides illustrating many of the ways of preventing fires and how all may co-operate.

The people of Danville had heard in a general way that something like three hundred millions of dollars were wasted each year by the American people in preventable fires, but they did not have any idea of just what part of that enormous sum comes from Danville and the State of Illinois until Mr. Bennett gave the facts during his talk.

Usually there is more or less resentment and criticism when officers clothed with authority from the State make a tour of inspection, issue orders to the number of more than three hundred requiring removals, changes and alterations in business houses. But in the work of these deputy fire marshals, there has not come to our notice a single instance where the recommendations were not cheerfully complied with.

It is safe to say that if the recommendations of State Fire Marshal Bennett are complied with, our fire waste, instead of three dollars per capita as it now stands, would be nearer to thirty cents, as it is in other countries. And just as the problem of vocational training, military training and other problems for the future citizens are being taken up in the schools, Mr. Bennett in going before the public and private educational institutions, is beginning his work in the right place.

(Signed) P. L. WILLS, Secretary.

February 1, 1917.

The following notice, in post card form, was sent out by the Danville Chamber of Commerce to 1,000 business men of the city:

To-Night, Thursday, October the 19th!

At the Armory

Beginning at 8 o'clock, the members of the Chamber of Commerce and the general public

are invited to see in high grade new motion pictures

"THE LESSON OF THE FLAMES"

An illustrated lecture by State Fire Marshal Walter H. Bennett. Fifteen deputy fire marshals have spent this week making a survey of Danville. The meeting tonight will disclose conditions of vital interest to every citizen. Bring your friends and be on time.

Yours for Greater Danville,

P. L. WILLS, Secretary.

Danville, October 19, 1916.

ADOPTED PLAN FOR STATE WIDE SURVEY.

The State Fire Marshal, at the beginning of the year 1916, put into operation a systematic plan for a state-wide survey of fire hazard conditions. During the year fifty cities and towns were inspected and the work re-checked by Deputies from this Department. The work under the present plan has proven so satisfactory that it will be continued along the same lines during the ensuing year, and there is little doubt but that the general plan now in use will be made permanent and become a fixed part of the work of the Fire Marshal Department in Illinois.

After several years of experience we have found it necessary for effective work that we must receive the hearty co-operation of the municipal authorities and business interests of each community. The plan formulated by the State Fire Marshal for carrying out this work is to send a representative to confer with the mayor, city council, officers of the commercial clubs and associations, public school officials, newspaper men, and in fact all organizations interested in the improvement and the general welfare of the public. If our representative receives sufficient encouragement to conduct a survey and hold a public meeting, a suggested resolution is placed in the hands of proper parties for adoption, and is as follows:

RESOLVED, By the City Council of, Illinois, that the State Fire Marshal be invited to conduct a survey of fire hazard conditions in this City and also designate a day for a public meeting for the discussion of fire prevention and the conditions existing in the said City, to be in charge of him and his assistants;

That Commercial Association, together with the Mayor be authorized to appoint the necessary committees to make arrangements.

If this or a similar resolution is regularly adopted and a date is fixed for the work to be done, the Department furnishes a supply of posters calling attention to the character, time and place of meeting. Also an arrangement is made with the officials in charge of the public schools to give lectures illustrated with stereopticon slides and motion picture reels which have to do with fire prevention work, during the visit of the State Fire Marshal. The public meetings are usually held in a hall or theater building of suitable location and convenience.

The force of State Deputies who are to conduct the survey are notified in advance to report and be ready for duty at an appointed hour. We usually establish headquarters at the City Hall or in a building occupied by the commercial club or association. This is arranged according to the most convenient location. All of the business portions of a city are covered under this survey. Also, any special hazards located within the city limits.

Each Inspector is assigned a different allotment of territory, and he is instructed to visit each and every building in the district to be covered. He is provided with a printed form of blank, and each report is made in triplicate. When defects are found the original is left with the owner, occupant or agent; the duplicate is kept on file in the Department, and the triplicate is for the convenience of the Deputy to re-check his work at a later date.

In the larger cities it is our plan to assign a special man to inspect the public school buildings, another for the churches and one for public halls and theater buildings. This special work is assigned to those who are particularly qualified to handle this class of work. We find this a better plan because of the fact that work done in this manner is put on a uniform basis.

For this work in the larger cities we have the co-operation and assistance of a number of special inspectors assigned under the direction of the Illinois State Fire Prevention Association, who assist the Department in securing improved conditions and promoting fire prevention work. In this connection we desire to heartily commend the valuable service of local Fire Chiefs in lending the assistance of their firemen to accompany our Deputies while performing inspection duties.

It is the practice of the Department to re-assign the Deputies or State Inspectors for the purpose of checking up the work done

within a period of thirty days time after the first visit. We have been very much gratified to find that, at the time of the second visit of our Deputies, a very large proportion of the defects pointed out have been properly corrected.

The remaining uncompleted corrections make it necessary to have one or more Deputies return to each city and spend considerable time in bringing about due compliance. Only in a very few cases are we compelled to resort to filing legal complaints and having fines assessed for failure to meet the requirements under our order.

The plan which we have put into operation has proven successful because of the fact that the co-operation of the general public is brought about through the influence of municipal officials, business organizations, boards of education and the public press.

STATE DIVIDED INTO DISTRICTS.

The Department of Inspection has been directly in charge of First Deputy W. S. Hoopes, with S. Legreid as assistant. Under their direction the work is being systematically supervised in the State, which is divided into twelve districts, a number of counties being allotted to each district. A Deputy Fire Marshal as special inspector has been placed in charge of each inspection district, and all the inspections in those counties which his district embraces are under the personal supervision and charge of this Deputy.

Inspections in the city of Chicago and in the counties of Lake, DuPage and all of Cook outside of the city of Chicago, are under the supervision of Chief Deputy A. A. Bach, who has charge of the Chicago office of the State Fire Marshal. This is known as District No. 1.

District No. 2, east half, M. J. Durr, Chicago, in charge: Counties of Winnebago, Boone, McHenry, DeKalb and Kane.

District No. 2, west half, Robert Harper, Rock Falls, in charge; Counties of Stephenson, Carroll, Ogle, Whiteside, Lee and Jo Daviess.

District No. 3, William L. Berger, Geneseo, in charge: Counties of Rock Island, Henry, Mercer, Henderson, Warren, Knox and Fulton.

District No. 4, L. C. McMurtrie, Lacon, in charge: Counties of Bureau, LaSalle, Kendall, Grundy, Putnam, Stark and Marshall.

District No. 5, Edward Holland, Bloomington, in charge:

Counties of Will, Kankakee, Iroquois, Ford, Livingston and McLean.

District No. 6, William F. Ryan, Peoria, in charge: Counties of Peoria, Woodford and Tazewell.

District No. 7, M. E. Norton, Galesburg, in charge: Counties of Hancock, McDonough, Adams, Schuyler, Brown and Pike.

District No. 8, J. E. Gallivan, Champaign, in charge: Counties of DeWitt, Logan, Mason, Cass, Menard, Macon, Piatt, Sangamon, Morgan, Christian, Scott, Greene, Jersey, Macoupin, Montgomery, Shelby and Moultrie.

District No. 9, Charles J. Roberts, Champaign, in charge: Counties of Champaign, Vermilion, Douglas, Coles, Edgar, Clark and Cumberland.

District No. 10, S. Legreid, Centralia, in charge: Counties of Fayette, Effingham, Jasper, Crawford, Lawrence, Richland, Clay, Marion, Jefferson, Wayne, Edwards and Wabash.

District No. 11, Tony Brucks, East St. Louis, in charge: Counties of Madison, Bond, Clinton, St. Clair, Monroe and Washington.

District No. 12, J. Q. Snedeker, Marion, in charge: Counties of Perry, Franklin, Randolph, Hamilton, White, Gallatin, Saline, Williamson, Jackson, Union, Johnson, Pope, Hardin, Massac, Pulaski, and Alexander.

Following is a short resume of the inspection work accomplished by this department during the year 1916:

Number of inspections made	15,850
Number of orders issued	15,323
Orders for repair of flues	921
Orders for repair of buildings	1,962
Orders for erection of fire escapes	698
Orders for picture booths	309
Orders for correction of electrical defects	3,646
Orders for safe storage of gasoline	622
Orders for removal of rubbish	4,504
Orders for safe storage of explosives	40
Orders for ropes in hotels	200
Special orders	2,421

A RECORD OF CONVICTIONS FOR FAILURES TO COMPLY WITH DEPARTMENT ORDERS.

John Siegel, East St. Louis, St. Clair County. Arrested November 28, 1916, and fined \$10 and costs, amounting to \$17.45, in Justice Haley's court, for non-compliance with Department order calling for proper storage of gasoline and other necessary recommendations for safety from fire.

J. W. Hoar, East St. Louis, St. Clair County. Arrested November 28, 1916, and fined \$10 and costs, amounting to \$17.45, in Justice Haley's court, for non-compliance with Department order calling for proper storage of gasoline and other necessary recommendations for safety from fire.

Stephen Monahan, East St. Louis, St. Clair County. Arrested November 28, 1916, and fined \$10 and costs, amounting to \$17.45, in Justice Haley's court, for non-compliance with Department order calling for proper storage of gasoline and other necessary recommendations for safety from fire.

Ralph Davies, East St. Louis, St. Clair County. Arrested November 28, 1916, and fined \$10 and costs, amounting to \$17.45, in Justice Haley's court, for non-compliance with Department order calling for proper storage of gasoline and other necessary recommendations for safety from fire.

Mrs. A. Mestmacher, East St. Louis, St. Clair County. Arrested November 28, 1916, and fined \$10 and costs, amounting to \$17.45, in Justice Haley's court, for non-compliance with Department order calling for proper storage of gasoline and other necessary recommendations for safety from fire.

G. A. Bianki, Lincoln, Logan County. Arrested December, 1916, and fined \$10 and costs, amounting to \$12.50, in Justice Davis' court, for failure to comply with order calling for removing rubbish from basement. On the fourth inspection the Deputies found conditions, bad and caused the arrest.

John Kjoller, Granville, Putnam County. Arrested December 21, 1916, and fined \$20 and costs, in justice court, for failure to comply with Department order calling for the removal of fire hazard conditions.

C. W. Olinger, Franklin, Morgan County. Arrested December 23, 1916, and fined \$20 and costs, in Justice W. C. Hart's court, for failure to comply with Department order calling for the removal of fire hazard conditions.

STATE INSPECTION OF PUBLIC SCHOOL BUILDINGS,

By Edgar C. Pruitt, County Superintendent of Schools,
Sangamon County.



EDGAR C. PRUITT

Loss by fire is enormous in the State of Illinois. It averages over \$1,000,000 a month. Many states in the Union have passed laws which tend to reduce the destruction of buildings by fire. While fire is one of man's greatest blessings, it is at the same time a great menace to life and property everywhere. That much of this loss could be prevented by proper care on the part of the public is not debatable. Our people must be aroused to the awful destruction fire is causing all around us, and their co-operation in the prevention of the same must be sought at all times. Because of the great loss to the State by fire, it is the State's business to provide means as far as practicable to combat this evil and to help

prevent this loss. State inspection of public school buildings and other buildings is absolutely essential.

The Sanitation law requires the county superintendent of schools to call upon the State for assistance in passing on public school buildings that may be unsafe, insanitary, or in danger from fire. A competent person is sent out to inspect such schools and to make such report to the county superintendent and school boards as the case demands. In this way public school buildings may be inspected by proper authorities without much loss of time or expenditure of money, thus rendering valuable service to school officials.

Public school buildings should be inspected regularly, and when necessary, changes to prevent fire should be made.

More attention should be paid to fire prevention. Let the people know about the ways to prevent fires. The dissemination of knowledge in regard to fire hazards is of great value.

The State Fire Marshal's office has accomplished much towards this end in the publication of the Fire Prevention School Reader in 1915. This valuable little book of 96 pages, dealing with ways and means of fire prevention has accomplished much in arousing the public to the great danger of fire. This book found its way into many schools in Sangamon County last year. A number of our schools had Fire Prevention programs and invited a representative from the State Fire Marshal's office to be present and give an address.

Another way of calling the attention of the people to fire prevention has been through the stereopticon. The State Fire Marshal's office has used this method very successfully in this county and elsewhere in the State.

During the past year I had occasion to call on the State Fire Marshal's office for assistance in inspecting many school buildings in regard to fire hazards. In every case a competent person was sent out who made such inspection of buildings as was necessary. In this way much valuable service was rendered to school boards and the county superintendent.

The people must co-operate with the State officials in abating the awful destruction that comes to life and property in Illinois by fire, that could in many cases be prevented.

Schools must do their part to this end. Fire drills should be given regularly in all of the larger school buildings. The ninth of October each year, the anniversary of the great Chicago fire, is designated as Fire Prevention Day. On this day every school could render no better service to the community than that of having a program dealing with fire prevention.

The State through the Fire Marshal's office is doing a great service to the people.

Co-operation is the one great thing needed.

A constant vigil must be kept up.

"Fire is a monster of so frightful mien, that to be dreaded needs to be seen."

SCHOOL INSPECTIONS.

The State Fire Marshal Department is very much interested in providing adequate protection for the children in the school houses

of Illinois. It is only through the fortune of Providence that we have been spared the tragedy of the Collinswood school fire, where a few years ago 175 children were burned to death as a result of the same conditions that yet prevail in many of our Illinois schools.

The last session of the legislature took an advanced step when it enacted the school house sanitation and safety from fire law. This wise and helpful measure stands as a monument to the everlasting credit of those legislators in Springfield who recognized the necessity of providing ample and complete protection for the children in the public schools of our State.

The Department for some time has been making a school campaign with the idea in view of carrying out the true intent and purpose of this law.

As a concrete example of the benefits to be derived by the public from the work of the Department the capitol city of Springfield presents a typical example.

About the middle of April last the Department made a survey of Springfield from a fire hazard standpoint. Included in this work was an examination of the Ridgely school building. After the Supervisors of Inspections had finished his work a report thereof was delivered to the Superintendent of Schools, and a like copy to the President of the Board of Education.

This report contained the following paragraph:

“RIDGELY SCHOOL.

“Brick building. More than two stories high. 510 pupils. Fire drill $1\frac{1}{4}$ minutes. Needs: Stand pipe and hose; fire extinguishers; fire escapes. All paper, rubbish, oily barrels, etc., to be removed. Provide metal container for sweeping compound. Incombustible roof on old part of building in place of old shingle roof.”

Following this survey there were some negotiations carried on with the school authorities in an effort to secure a compliance with all of the recommendations and requirements of the State Fire Marshal Department.

The school authorities were not in accord with the position taken by the State Department and questioned the wisdom of some of the recommendations. They took no steps to comply with the orders affecting the Ridgely school building other than cleaning out rubbish, etc.

On November 15th, 1916, the Ridgely school building was burned during a school session, with a loss of perhaps \$20,000. It was only through the efficiency of the fire drill as practiced in that

particular school that the pupils were able to escape from the building. Had the orders of the State Department been complied with, in all probability the building would not have caught fire or burned.

The very thing that caused the loss was specifically pointed out to the school authorities at the time the survey was made, and they were urged to remove the defects there found to exist.

It is earnestly to be hoped that the Ridgely school fire will prove a lesson to school authorities everywhere, and interest them in complying with all reasonable requirements of the State Fire Marshal Department for the safety of the children of Illinois.

The seriousness with which trial judges are coming to regard negligent fire hazard conditions, is well illustrated by the following Associated Press dispatch of January 26, 1917.

PRISON FOR FIRETRAP OWNER.

Judge Says Penitentiary Sentence Will Assure
Proper Exits.

New York, Jan. 26.—Asserting that a sentence in prison should teach a far-reaching lesson to factory owners and tenants who fail to provide proper fire exits, Supreme Court Justice Kapper today sent Samuel Barkin to Sing Sing for from 2½ to 5½ years. Barkin is part owner in a shirt making company, where nine women and four men lost their lives in a fire because the door between their place of work and Barkin's floor was locked. His partner and the building's owners, are still to be tried.

THE REDUCTION OF THE FIRE HAZARD.

The Benefit to Municipalities of State Inspection of Fire Hazard Conditions.



ADDISON J. PLATT

The matter of fire protection is one that vitally interests every property owner, large or small, to a very much greater extent than the ordinary taxpayer is aware. In fact, it is of very much more importance than I personally had any idea of, until the past three years, during which time I have been mayor of our city and have given this matter considerable thought.

From figures at hand, a conservative estimate places the yearly outlay by the citizens of this city in the way of insurance premiums, at sixty thousand dollars, which is ten thousand dollars more than we annually collect for all city purposes combined. In addition to this, the maintaining of a paid fire department, hydrant

rental and other expenses in connection with our fire-fighting organization, is at least twelve thousand dollars additional. This makes an outlay for fire protection, directly and indirectly, of an amount equal to forty per cent more than the amount levied for all municipal purposes. This, as will readily be understood, is a large bill for fire protection, and anything that can be accomplished in the way of reducing fire losses, and decreasing insurance rates, is of great importance to any community.

The fire insurance policy, while it usually returns to the loser a considerable percentage of his loss, always falls far short of covering, if not the actual loss in dollars and cents, that contingent loss of business interests—being put out of existence for an indefinite

time, and the destroying of many trade connections that very often prove permanent.

The duties connected with the Department in charge of the State Fire Marshal, I feel are of great importance to the property interests of our State, and I know this has been true in the city of Sterling. About a year ago we had a very thorough inspection of all property in our city, at which time we were favored with a visit from Hon. Walter H. Bennett, State Fire Marshal, and an able corps of assistants. Many orders were issued and suggestions made in the interests of reducing fire hazards that I feel certain were of great advantage to our interests here. While the directions in reference to changes in certain conditions were quite sweeping in some cases, yet all were willingly complied with, and I feel that the result has been very beneficial to all business interests.

Further, we found a number of buildings which should have been provided with fire escapes and which were not furnished with any protection of this sort. In some cases these buildings were devoid of any arrangement whatever for protecting the lives of the occupants from danger of fire. The result of inspection in this direction has been the installation during the past year of thirteen fire escapes on different buildings in our city, and this I feel was a very desirable result secured through the assistance and co-operation of the State Fire Marshal's Office.

That there is a large field for the continuous and persistent work of the Fire Marshal Department I feel certain. I believe that the heads of every municipality in Illinois should avail themselves of the benefits to be secured through the co-operation of this Department. With the aid they may give us, many necessary regulations with which this Department is familiar can be put into effect which will greatly reduce the drain from fire losses, as well as materially reduce the fire protection outlay that is now being expended. The installing of necessary and proper fire escapes that are serviceable and always in commission is also a very important part of the duties of the State Fire Marshal Department, the enforcement of which is of great importance.

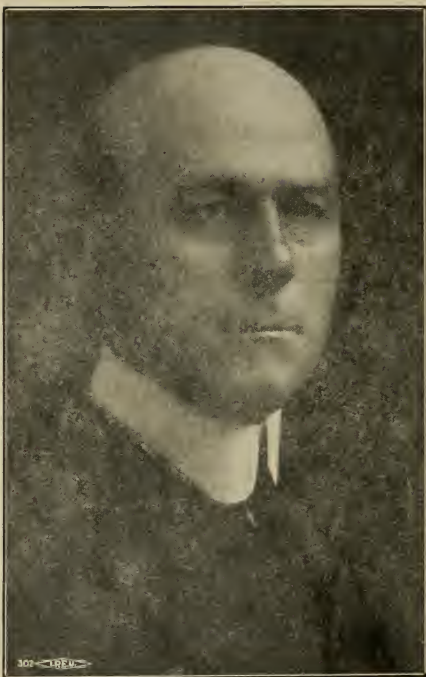
(Signed) ADDISON J. PLATT, Mayor.

Sterling, Illinois,
February 1, 1917.

PART III.

DEPARTMENT OF INVESTIGATION.

The career of the fire-bug in Illinois is brief, his apprehension and conviction certain, and his punishment sure. The doors of the penitentiary are opening wide to receive him.



FRANK R. MORGARIDGE
Assistant State Fire Marshal
Resigned February 1, 1917

DEPARTMENT OF INVESTIGATION.

INVESTIGATIONS, ARRESTS AND PROSECUTIONS.

The following is a summary of the work of the Fire Marshal Department of the State of Illinois for the year 1916 in the investigation of incendiary fires, or of those fires reported to the Department as being of suspicious origin.

When the Department was first organized the Fire Chiefs of the State were rather timid about reporting fires to us, giving the cause as incendiarism. In fact, many Chiefs reported as incendiary only those fires in which strong evidence existed tending to fix the responsibility for the fire.

At the present time, however, the Fire Chiefs are very active in the suppression of the crime of arson, and whenever a suspicious fire occurs they at once look for evidence of incendiarism and frequently have sufficient evidence developed to cause the arrest and prosecution of the suspect without any special attention from this Department.

During the year 1916 there were reported to the Department as being of incendiary origin, 420 fires. Some of these fires, however, proved to have been of accidental origin after an investigation by this Department, and the number of proven incendiary fires in the State for the year 1916 amounted to 290.

The State of Illinois is rapidly becoming an unprofitable place for the operation of the fire bug, and gradually the arson gangs which formerly operated in the State are being driven either out of the State or sent to the penitentiaries.

That many incendiary fires are caused by persons who are not mentally responsible, or not in a condition to really have what would be considered a motive for setting them, is now a well known fact. Persons suffering from pyromania or some other form of monomania frequently set fires while under some form of a delusion. There are many of these unfortunates at large in this State, and the wonder is that more fires are not set by them.

Following is a resume of the work of investigation:

Number of fires reported incendiary, 420.

Number of incendiary fires developed, 290.

Number of fires investigated, 410.

Number of arrests, 75.

Number of indictments, 42.
Number of cases tried, 52.
Number of persons convicted, 37.
Number of persons acquitted, 14.
Number of cases pending, 46.
Number of confessions, 11.

**A RECORD OF PROSECUTIONS FOR ARSON AND BURN-
ING TO DEFRAUD IN THE STATE OF ILLINOIS
OUTSIDE OF COOK COUNTY FOR THE
YEAR 1916.**

This record does not contain those cases which have been brought to trial and the defendants found not guilty:

Fred Zang, Jr., Quincy, Adams County. Arrested January 4, 1916, charged with having set fire to several barns. Made a confession and was taken before the County Judge and a commission of physicians and adjudged insane. He was committed to the asylum at Jacksonville.

Fred Kiefer, Peoria, Peoria County. Arrested February 3, 1916, charged with arson. Made a confession to the Peoria Police department and was recommitted to the insane asylum at Peoria, from which he was an escaped inmate.

Jake Austin, Danville, Vermilion County. Arrested November 2, 1915, charged with arson. Indicted January, 1916. Case tried before Judge Brewer in the circuit court February 10, 1916, and jury returned a verdict of guilty. Sentenced to penitentiary for indeterminate sentence of from one to twenty years.

Harry Klutzkee, alias Harry Brown, Danville, Vermilion County. Arrested November 1, 1915, charged with arson and burning to defraud. Indicted for attempting to work confidence game. Tried in circuit court February 17, 1916, and jury returned verdict of guilty. Sentenced to penitentiary for indeterminate term of from one to ten years.

Jesse Brock, Cairo, Alexander County. Arrested November 3, 1915, charged with arson. Made a confession. Indicted February, 1916. Entered a plea of guilty and was given an indeterminate sentence of from one to twenty years.

Mabel Bartmes, Decatur, Macon County. Indicted February 5, 1916, charged with arson and burning to defraud. Tried in the circuit court of Macon County February 21-26, 1916. Jury returned a

verdict of guilty on both charges. Sentenced to the penitentiary for an indeterminate term of from one to twenty years.

Jessie Spoon, Decatur, Macon County. Indicted February 5, 1916, charged with arson and burning to defraud. Tried in the circuit court of Macon County February 21-26, 1916. Jury returned a verdict of guilty on both charges. Sentenced to the penitentiary for an indeterminate term of from one to twenty years.

Lee Cassford, Rockford, Winnebago County. Arrested February 20, 1916, charged with setting fire to his sister's dwelling. Taken before County Judge and a commission of physicians and found to be insane. Committed to the asylum at Elgin.

Mrs. M. Prickett, Centralia, Marion County. Arrested February, 1916, charged with setting fire to her residence. Taken before County Judge and a commission of physicians and adjudged insane. Committed to the asylum at Anna.

William Massey, Eldred, Greene County. Arrested October 15, 1915, charged with arson. Indicted February, 1916, for burning to defraud. Tried in the circuit court of Greene County, March 20, 1916. Jury returned a verdict of guilty. Sentenced to the penitentiary for an indeterminate term of from one to ten years.

Miles M. Ross, Eldred, Greene County. Arrested October 15, 1915, charged with burning to defraud. Indicted at the February term of the grand jury, 1916. Taken before circuit judge and entered a plea of guilty. Given an indeterminate sentence in the penitentiary of from one to ten years.

John M. Wolf, Sullivan, Moultrie County. Indicted by the grand jury of Macon County, at Decatur, February 7, 1916, for arson and burning to defraud. Case tried at Decatur, March, 1916. Change of venue granted from Judge Whitfield to Judge Partlow of Danville. Jury returned a verdict of guilty to burning to defraud charge. Sentenced to the penitentiary for an indeterminate term of from one to ten years.

C. N. Bishop, Peoria, Peoria County. Arrested May 6, 1916, for turning in false alarms of fire. Took a plea of guilty, and sentenced to the House of Correction for a term of six months.

James W. Logan, Sorento, Bond County. Indicted January 11, 1916, for arson and assault with intent to kill. Tried May 8 and 9, 1916, for assault to commit murder. Jury returned a verdict of guilty. Sentenced to the penitentiary for a term of from one to ten years.

Gordon Beetham, Galesburg, Knox County. Arrested May 5, 1916, charged with arson. Arraigned before Justice of Peace R. J.

Wahlberg, and charge reduced to disorderly conduct. Fined \$200, in default of which he was sent to the county jail.

Evelyn Clapham, Nokomis, Montgomery County. Arrested March 7, 1916, in connection with a fire which occurred at Tower Hill in 1915. Held to await action of the grand jury under bond of \$500, in default of which he was held in county jail. He later obtained bonds and was released, and on April 4th he went to his former home, shot his wife and himself. He later died from the effects of the shooting.

Lee Wentworth, Quincy, Adams County. Arrested March 27, 1916, for setting fire to barn at Soldiers Home at Quincy. Indicted May, 1916. He was adjudged insane by a commission of physicians and was taken to the asylum at Jacksonville.

Clint Ogles, Marissa, St. Clair County. Arrested August 6, 1915, charged with arson. Indicted September, 1916, charged with attempt to set a fire. Tried in the circuit court of St. Clair County, May 30th, 1916. After hearing witnesses for the prosecution, Judge Crow threw the case out of court on the grounds that the indictment charged an attempt to set a fire, while the evidence showed he actually committed the crime of arson, and the indictment should have been drawn under Section 13.

C. W. Alexander, Decatur, Macon County. Arrested February 10, 1916, charged with burning to defraud and attempting to burn. Indicted May, 1916, for both charges. Case called for trial June 12, 1916. Alexander entered a plea of guilty to attempting to burn, and the arson charge was dismissed by State's Attorney Deck. Alexander paid court costs and reimbursed insurance company for money paid for his fire loss, and was placed on probation by Judge Whitfield.

Mrs. Elizabeth Carter, Jacksonville, Morgan County. Indicted on a charge of arson, May, 1915. Her son also was indicted at this time on a charge of arson. He became a fugitive from justice, and because of this the case was continued from time to time. Mrs. Carter was arraigned in the circuit court June 16, 1916, and entered a plea of guilty to arson. Owing to her advanced age, she was placed in charge of a parole officer, and sentence was suspended.

John D. Smith, Galesburg, Knox County. Arrested May 5, 1916, charged with having set a fire. Indicted under Section 15 of Chapter 38, for burning the personal property of another, May, 1916. Arraigned in the circuit court June 19, 1916, and entered a plea of guilty. Given an indeterminate sentence of from one to six years in the penitentiary.

Clyde Ehringer, Washburn, Woodford County. Arrested May 29, 1916, charged with arson and sending obscene literature through the mails. Held on latter charge to await action of the Federal Grand Jury. Having shown evidences of insanity he was taken before the county judge and a commission of physicians and was adjudged insane. He was committed to the State Hospital at Bartonville, July, 1916.

Charles G. Snyder, Waddams, Stephenson County. Arrested August 19, 1916, charged with having set fire to another's property. Taken before county judge and a commission of physicians and adjudged insane. Committed to the asylum at Watertown.

Walter Leonard, Metropolis, Massac County. Held by coroner's jury of Massac County, charged with murder, he having set fire to the clothing of Walter Fisher, while both were inmates of the county jail at Metropolis. Indicted August, 1916. Tried in the circuit court of Massac county at the September term, 1916, and a verdict of guilty was returned. Sentenced to the penitentiary for a term of fifteen years.

Marshall Davis, Champaign, Champaign County. Accused of setting fire to home of his sister. Taken before county judge and declared to be a delinquent. He was paroled to his parents.

Ben Ehrhardt, Galena, Jo Daviess County. Arrested September 5, 1916, charged with arson. Held to await action of the grand jury. His condition being such at the time he set the fire that he was unable to form any intent of arson, the State's Attorney dismissed the arson charge and gave him a jail sentence.

Temam Bergo, Beardstown, Cass County. Arrested October 1, 1916, charged with arson. Taken before County Judge Martin and a commission of physicians and adjudged insane. Committed to the State Hospital at Jacksonville.

Max Zucker, West Frankfort, Franklin County. Arrested February 21, 1916, charged with arson. Indicted May, 1916. Case called for trial at the September term of the circuit court, 1916, and when Zucker failed to put in an appearance his bond was declared forfeited.

Charles Davies, Chester, Randolph County. Arrested September, 1916, charged with attempting to burn the property of another. Indicted by the grand jury of Randolph County, September, 1916. Tried in the circuit court at the September term, 1916. Jury returned a verdict of guilty. Sentenced to the penitentiary for a term of one year.

Anton Ahrling, Jerseyville, Jersey County. Arrested February,

1916, charged with having killed his wife and burned her body in their home. Indicted May, 1916. Tried in the circuit court of Jersey County, October, 1916, and jury returned a verdict of guilty. Sentenced to the penitentiary for term of fourteen years.

Fred Neal, Canton, Fulton County. Arrested June 20, 1916, charged with having set fire to personal property of another. Indicted September, 1916, charged with arson and assault with intent to do bodily injury. Neal entered a plea of guilty to the latter charge and was given a jail sentence. The arson charge was nollied by the State's Attorney.

Collins Houchins, Pekin, Tazewell County. Arrested November 30, 1916, charged with arson. He was an escaped inmate of the State Hospital at Jacksonville, and on an order from the Board of Administration he was transferred from the county jail at Pekin to the hospital for the Criminal Insane at Chester.

Victor Steiner, Decatur, Macon County. Indicted by the grand jury of Macon County, May, 1916, charged with arson and burning to defraud. Also indicted by the Federal grand jury for concealing and not scheduling assets in a bankruptcy proceeding. Convicted and sentenced to the penitentiary at Fort Leavenworth. The evidence for the federal indictment was brought out in the fire investigation.

U. A. Brady, Decatur, Macon County. Indicted by the grand jury of Jasper County, October, 1913, for confidence game. Case called for trial April, 1914, and jury returned a verdict of guilty. Case was appealed to supreme court and was reversed and remanded for rehearing. Later on, at the February term, 1916, the case was again reviewed and judgment of lower court affirmed. At the April term, 1916, motion for rehearing was denied, and defendant was sentenced to the penitentiary at Chester.

Ernest Blanchard, Decatur, Macon County. Indicted by the grand jury of Jasper County, October, 1913, for confidence game. Case called for trial April, 1914, and jury returned a verdict of guilty. Case was appealed to supreme court and was reversed and remanded for rehearing. Later on, at the February term, 1916, the case was again reviewed and judgment of lower court affirmed. At the April term, 1916, motion for rehearing was denied, and defendant was sentenced to the penitentiary at Chester.

George Merriweather, Decatur, Macon County. Indicted by the grand jury of Jasper County, October, 1913, for confidence game. Case called for trial April, 1914, and jury returned a verdict of guilty. Case was appealed to supreme court and was reversed and

remanded for hearing. Later on, at the February term, 1916, the case was again reviewed and judgment of lower court affirmed. At the April term, 1916, motion for rehearing was denied, and defendant was sentenced to the penitentiary at Chester.

Charles Willson, Stewardson, Shelby County. Indicted by the grand jury of Jasper County, October, 1913, for confidence game. Case called for trial April, 1914, and jury returned a verdict of guilty. Case was appealed to supreme court and was reversed and remanded for rehearing. Later on, at the February term, 1916, the case was again reviewed and judgment of lower court affirmed. At the April term, 1916, motion for rehearing was denied, and defendant was sentenced to the penitentiary at Chester.

THE IMPORTANCE OF STATE INVESTIGATION OF INCENDIARY FIRES.

By Hon. Jesse L. Deck, State's Attorney Macon County.



JESSE L. DECK

During the past year I have had occasion to observe, at first hand, considerable work done through the State Fire Marshal's Department of Illinois and have been so impressed with the results obtained through the agencies of this office that I feel a few words upon the above subject are pertinent, here.

Within twelve months this Department has presented to me, as State's Attorney of Macon County, evidence in three cases of incendiary fires resulting in indictments and the convictions of five defendants—three of whom were convicted of both arson and burning to injure an insurer, and two of the latter charge

only. Both of these crimes are felonies under our statute. These were the cases of the People vs. Mabel Bartmes, Jessie Spoon

and Ralph Lookabaugh; The People vs. John Wolf; and The People vs. Charles W. Alexander.

In the first case all the defendants were convicted of both arson and burning to injure an insurer. John Wolf was convicted upon the second charge and Alexander plead guilty to the second charge. In the Bartmes-Spoon-Lookabaugh case the first two defendants were intimately acquainted with Wolf who was tried in the second case.

Mrs. Bartmes and Mrs. Spoon are sisters and lived with their mother and little nephew running a boarding house within three blocks of one of the fire departments of Decatur when Mrs. Bartmes took out \$2,700.00 of fire insurance on a comparatively small amount of household goods. Soon after obtaining the insurance they moved from this location to a house about one and one-half miles from the nearest fire department. Lookabaugh was a frequent visitor at this place and was there on the night of the fire that resulted in this indictment.

Within a very short time after moving to the latter location a fire occurred about three o'clock one morning. The women involved, ran over to the neighboring residences and aroused the occupants. The neighbors considered their actions suspicious. The fire departments arrived much sooner than the defendants had, apparently, presumed they would and extinguished the fire before great damage was done to the house.

Investigation showed that the walls had been cut in a number of places and kerosene poured into the opening made. Streamers of lace curtains had been run up a back stairway to the second floor of the building, and thence on to the attic. The stairs along the lines of the streamers had been thoroughly saturated with kerosene and a large pool of the oil was placed at the end of the streamers in the attic.

One witness testified to smelling oil upon the clothing of Mrs. Bartmes while the fire was in progress. The mother and little nephew were also away from home on the night of the fire. The women defendants claimed to have been asleep in their bed room, where the fire was hottest when they first learned of the fire, but the evidence developed that they would have suffocated had they been in that room. Investigation of the bed also disclosed the fact that no person had slept in it that night. The defense was, that the defendants knew nothing of the fire trap in the house nor of the origin of the fire, but the jury did not agree with that theory.

In the Wolf case some land was traded by the defendant for a large residence in Decatur known as the "Cassell" property, title being taken in the name of the defendant's wife. The deal rested in contract for some time before deeds were delivered, during which time the defendant had the residence building insured for \$17,500 in the name of Cassell. This amount was far in excess of any insurance ever carried by Cassell while he owned the property. At the delivery of the deeds the insurance, which had been paid for by Wolf was assigned and transferred to his wife. In the deeds certain rights of way were reserved by Cassell in the Decatur property, which if exercised would cut off part of the steps to the building and bring a street immediately up to the house, which would make the property undesirable if the purchaser had intended to use the house.

At one time the defendant said "If that house ever gets on fire it will burn like a torch".

Within a few days after possession of the Decatur property was delivered under the deed, the "Cassell" property caught on fire. This occurred just after dark on one of the slipperiest nights of the year when travel by fire department was most difficult. The fire, however, was extinguished after much damage was done.

Investigation showed that the fire was of incendiary origin. There were four distinct fire traps extending from the basement to the upper floors. The plastering had been removed in a number of places and connections made by rope fuses covered with oil and lard through such openings connecting piles of kindling and cotton saturated with kerosene from floors below with those above.

A funnel with a right angled elbow attached was found in the house, which the evidence showed the defendant had had made by a tinner within a few days before the fire in a neighboring city. This had doubtless been used to throw oil into the walls. A valise, belonging to the defendant, in which kerosene had been spilled was also found in the house in close proximity to one of the fire traps.

The defendant spent the night before the fire in a hotel in Decatur and arose some hours before day light and left the hotel on the day of the fire.

The defendant attempted to make the defense of an alibi, but was unsuccessful in raising in the minds of the jurors a reasonable doubt as to his guilt.

In the Alexander case the defendant, while a school teacher in the Decatur schools, procured some insurance upon his household

effects and while hard up financially burned some of the same and obtained an adjustment of his loss and a settlement accordingly. Much suspicion surrounded the fire from the beginning, as the smell of kerosene was pronounced to the firemen, who attended the call.

The defendant left Decatur at the end of the school year, after the fire, and seemed to have difficulty in obtaining employment elsewhere because of the suspicion surrounding the fire. At least, the defendant considered this the source of his trouble in that regard.

Not obtaining a school the defendant entered a Michigan College, as a student, and while he was there a strange letter came to the Chief of the Decatur Fire Department, purporting to be written by a dying man in Detroit in which he made a confession that he being an enemy of Alexander, had fired his home to cause him trouble.

This letter was turned over to the State Fire Marshal. Authentic writing of the defendant was obtained from the school where he had taught and a very superficial comparison convinced both the Deputy Fire Marshal in charge and the State's Attorney that Alexander had written the confession himself. Some handwriting experts were called in and all agreed to the identity of the handwriting. Armed with this information the Deputy Fire Marshal immediately went to Michigan and interviewed the defendant, who, when confronted with the facts confessed his guilt and returned to Illinois with the Deputy for trial. Upon being indicted he entered a plea of guilty to burning to injure an insurer.

I have set out the salient facts in these cases to show that considerable investigation was necessary to bring these defendants to trial which local authorities in general are not equipped to do. The investigation of the first two cases covered weeks, and I have no hesitation in saying that had it not been for the State Fire Marshal's office and the assistance there extended in these cases, that conviction could have not have been had in any of them, and these cases would still be shrouded in mystery.

I am informed by fire authorities, that since these convictions were had, fire losses have decreased more than fifty per cent in Decatur, and they attribute much of this decrease to a profound impression that has been created here by these conviction.

No single community can afford to keep employed trained experts such as these investigations demand. It can only be done by the state through a State Fire Marshal Department.

The Department in Illinois is doing splendid work and I am convinced that the State should spare no reasonable expense to bring this Department of State up to the standard of greatest efficiency possible. Considering the safety to the lives and property of our citizens, its importance cannot be over-estimated.

THE PYROMANIAC.

Written at the Request of the State Fire Marshal by George A. Zeller, M. D., Member of the Board of Administration, and State Alienist.



DR. GEO. A. ZELLER

The use of fire is the dividing line between man and the brute creation—between the human and the non-human.

Animal intelligence, even of the highest order, ceases at the ability to produce fire or to profit by it.

There has never been a human race or tribe so low in the intellectual scale that it has not known how to generate fire and how to employ it to meet some destructive or other need or whim.

The highest type of ape or chimpanzee in the densest African jungle will sit around a fire and watch the last ember expire without once throwing a limb or stick to replenish it. He will eat cooked food, but has absolutely no way of cooking it himself.

The lowest type of Hottentot not only knows how to generate fire by friction, but is able to keep it burning as long as fuel is available.

Allusion to fire as a means of sacrifice, of devotion, or of the destruction of the wicked abound in the holy writ. The sun worshippers chose that orb as their God because it was the source of heat and light. The fire worshippers went even farther for they

reasoned that fire not only served their needs, but gave them the opportunity to commune with their deity at night, when the sun worshippers were without their visible God.

The eye of the infant will follow a spark of fire almost before it takes cognizance of any other phenomenon.

Human life in the temperate and semi-frigid zones would be absolutely impossible without fire, unless, after countless ages we were again to revert to the hairy cave dwellers from whom we descended, or like the migratory birds, we were to seek to escape the rigors of winter by journeying to the tropics.

Playing so important a part in our same existence, it is but natural to presume that the phenomena of fire would manifest themselves in the abberated mind.

The wholly demented person takes absolutely no notice of fire or heat. Innumerable instances have occurred where such patients have wandered away from institutions and have perished from cold within sight and reach of fire and shelter. With unconcern they allow their clothing to become ignited and make no effort to extinguish the flames, and will immerse themselves in boiling water without appreciable evidence of pain.

The exact reverse of the dement is the paranoiac—the man with the systemized delusion—known in the older nomenclature as the monomaniac. He may be a highly educated and accomplished individual in everything except his obsession and even this he may be able to conceal successfully for years.

When this paranoid delusion centers around fire we have the pyromaniac, just as in sex delusions we have the nymphomaniac, or in the uncontrollable thief, the kleptomaniac.

Either of these psychosis is capable of simulation in order to escape the consequences of crime, hence they have little standing in the eyes of the law, although legitimate cases are innumerable. There is no institution for the care of the insane that has not from one to a dozen true pyromaniacs. Very often they are known to the authorities through the court papers that accompany them or the subsequent case histories, written up after careful observation and study, but sometimes they escape detection until the mania manifests itself in the attempted destruction of some part of the institution in which they reside.

The so-called human firebug is a pyromaniac, yet he must be carefully differentiated from the criminal who employs fire as a means of securing gain through collecting insurance, or uses it to conceal crime or to wreak revenge or hatred.

To cite individual instances of pyromania would require dozens of printed volumes, but a few recent occurrences might serve to illustrate.

The big Kankakee State Hospital had a series of fires a few years ago which destroyed the laundry and several other valuable buildings. More recently it lost two barns and an immense stock of hay and grain.

The Chicago State Hospital had a similar experience within the past year, no less than fourteen fires occurring in rapid succession. As in Kankakee, a certain privileged patient was suspected, watched and caught in the act of continuing his depredations. With the cancellation of his parole the fires ceased.

A few years ago a series of fires occurred within the walls of the Joliet prison. A certain convict openly boasted of having caused them and upon examination he was found to be insane and was sent to the asylum for the criminal insane. The fires promptly ceased, but upon his return to the prison after his apparent recovery there was a recurrence of fires.

The closest observation failed to connect him with them, but when he was again transferred to the asylum there was another cessation of conflagrations. He is still in the asylum, yet within the past week a fire of greater magnitude than ever occurred in the prison, which probably indicates that this was not the only pyromaniac among the prisoners.

At one period when there appeared to be an epidemic of fires in the prison yard, one of the convicts who claimed to be in the pact told me that the fires were started by one prisoner in order to afford the others the opportunity of giving the alarm and gain the favorable notice of the pardon board by their heroic efforts in extinguishing the conflagration and saving property and lives. Surely this was madness with method in it.

We once had a patient who was a valuable helper around the institution. He protected the property of the state in every way, particularly against fire. He accompanied the fire marshal on his rounds and spent much of his time in polishing the fire apparatus, drying and reeling up the hose and recharging the chemical extinguishers. This same patient maintained a perpetual fire in the nearby woods which he fed with rubbish which we allowed him to collect, or such other waste material as was at hand. He would either sit on a log gazing at the fire or spend his time viciously poking it. Bones from the kitchen are a source of considerable salvage in an institution, and when I noticed that we had not made a sale for

some time and inquired into it, I was informed that bones were the principal part of this man's fuel. One day he found a dead cat and threw it into the flames and then his maniacal fury burst forth. He ran and caught a dog and before any one could stop him he threw it into the fire, taking particular delight in the agonized cries of the unfortunate animal. When his parole was withdrawn and he was returned to the ward, he became an invaluable aid to the nurses. He anticipated their every wish and his care of his fellow patients was most considerate, yet if one of them struck a match to light his pipe he would seize the burning remnant and parade around the room in the most agitated and excited manner. These outbursts would cease as abruptly as they began and in a moment he would subside into the most quiet, polite and helpful person in the ward. This man had served a term in the penitentiary for arson.

Not all pyromaniacs use fire for the purpose of injuring others. I knew a very refined and hypersensitive woman to become afflicted with a wholly delusional idea that she had committed an unpardonable sin. Her people did not desire that she be sent to an asylum and tried every means to dissuade her from her undeserved self-reproach. One morning they found in her vacant room a note saying that she was going to purge herself of her great sin by a burnt offering. They saw smoke in the nearby timber and upon going there, found her charred body among the ashes of what had been a cord of wood.

She had set fire to it, climbed on top and deliberately remained there without an outcry while her body was being consumed. So determined was she that when found the knees were still flexed in prayer and the remaining stubs of her arms were raised above her head in an attitude of supplication.

I was the foreman of the coroner's jury that passed upon this case. It occurred many years before I became connected with the care of the insane, but the tragedy of the situation is fresh in my mind to this day.

These are types that are well known to psychiatry and with the great advance that has been made in mental examinations and the accuracy and uniformity of the institutional records, their recognition will become an easier matter and in this way the state hospitals will prove to be valuable aids in the campaign against fire losses.

PART IV.

THE STATISTICAL RECORD.

The fire losses in the State of Illinois have been steadily decreasing and the loss for 1915 was the lowest in ten years. While we have been congratulating ourselves on this fact, we are rudely awakened to a realization that the fire loss in 1916 shows an increase. This, however, does not prove a backward tendency on the part of the State Department and other fire prevention agencies.

It is not possible to measure the success or failure of any movement by the results of any one year. Three especially large fires are directly responsible for much of the increase in the fire loss in 1916. Illinois, however, is growing in population and in wealth and beside that, property today is, in a great many instances, worth a hundred per cent more than it was three years ago and this inflation of values is the real reason for the apparent increase in the fire loss for this year.

THE STATISTICAL RECORD.

PROPERTY LOSS.

Aggregate Value of Buildings and Personal Property Showing Insurance Thereon and Total Damage by Fire in the State of Illinois From January 1, 1916, to December 31, 1916.

Total value of buildings, in which fires have occurred.....	\$85,330,116
Total damage to said buildings	6,943,449
Total insurance on said buildings	46,860,789
Total value of personal property jeopardized by fire.....	49,015,800
Total damage to said personal property	6,541,634
Total insurance on said personal property	30,930,029
Total fire loss in the entire State of Illinois	13,485,083
Total number of fires in the entire State of Illinois	15,693

Aggregate Value of Buildings and Personal Property Showing Insurance Thereon and Total Damage by Fire Outside of the City of Chicago From January 1, 1916, to December 31, 1916.

Total value of buildings, in which fires have occurred.....	\$25,359,824
Total damage to said buildings	5,261,434
Total insurance on said buildings	14,705,452
Total value of personal property jeopardized by fire	15,597,011
Total damage to said personal property	4,199,959
Total insurance on said personal property	8,997,874
Total fire loss outside the City of Chicago	9,461,393
Total number of fires outside the City of Chicago	9,260

Aggregate Value of Buildings and Personal Property Showing Insurance Thereon and Total Damage by Fire in the City of Chicago From January 1, 1916, to December 31, 1916.

Total value of buildings, in which fires have occurred.....	\$59,970,192
Total damage to said buildings	1,682,015
Total insurance on said buildings	32,155,337
Total value of personal property jeopardized by fire	33,418,789
Total damage to said personal property	2,341,675
Total insurance on said personal property	21,932,155
Total fire loss in the City of Chicago	4,023,690
Total number of fires in the City of Chicago	6,433

**Number of Fires and the Loss Therefrom in the State of Illinois
For Each Month of the Year 1916.**

Month	No. of Fires	Fire Loss
January	1,329	\$1,067,386
February	1,381	1,005,901
March	1,533	1,504,081
April	1,164	742,843
May	1,246	1,096,696
June	1,087	601,052
July	1,160	678,954
August	1,224	1,282,088
September	1,322	1,052,838
October	1,277	1,020,911
November	1,429	1,616,978
December	1,541	1,815,305
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	15,693	\$13,485,083

**Number of Fires and the Loss Therefrom in the State of Illinois
Outside the City of Chicago for each Month of the
Year 1916.**

Month	No. of Fires	Fire Loss
January	622	\$ 688,931
February	784	683,666
March	968	1,201,126
April	646	557,658
May	745	826,556
June	822	450,047
July	693	492,909
August	735	725,333
September	772	824,273
October	712	792,981
November	915	987,883
December	846	1,230,030
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	9,260	\$9,461,393

**Number of Fires and the Loss Therefrom in the City of Chicago for
Each Month of the Year 1916.**

Month	No. of Fires	Fire Loss
January	707	\$ 378,455
February	597	322,235
March	565	302,955

April	518	185,185
May	501	270,140
June	265	151,005
July	467	186,045
August	489	556,755
September	550	228,615
October	565	227,930
November	514	629,095
December	695	585,275
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	6,433	\$4,023,690

CLASSIFICATION OF CAUSES, NUMBER OF FIRES AND THE LOSS THEREFROM ACCORDING TO CAUSES.

Cause	Number	Damage
1—Chimneys, Flues, Cupolas and Stacks, over-heated or defective	1,440	\$ 795,170
2—Electricity	440	572,479
3—Explosions	201	587,856
4—Exposure	1,241	1,068,726
5—Fireworks, Fire Crackers, Balloons, etc.....	47	4,077
6—Friction	47	99,267
7—Gas—Natural and Artificial	172	54,692
8—Hot Ashes and Coals	197	67,213
9—Hot Grease, Oil, Tar, Wax, Asphalt, (ignition of)	69	53,786
10—Hot or Molten Metal	80	90,934
11—Incendiarism	420	532,121
12—Lightning—buildings rodded		
13—Lightning—buildings not rodded.....	705	886,977
14—Matches	1,205	493,370
15—Miscellaneous—Cause known, but not classified	104	30,195
16—Open Fires	287	40,778
17—Open Lights	329	87,338
18—Petroleum and its products	689	472,812
19—Rubbish and Litter	384	62,030
20—Smoking (Cigars, Cigarettes, Pipes, etc.)....	385	207,384
21—Sparks—Arising from combustion	1,861	872,366

22—Sparks—Occasioned by running machinery, including Pickers, Carding Machines, Gins, etc.	206	117,660
23—Spontaneous Combustion	491	547,711
24—Steam and Hot Water Pipes	57	46,987
25—Stoves, Furnaces, Boilers and their Pipes.....	1,131	624,404
26—Unknown	3,505	5,068,750
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	15,693	\$13,485,083

**CLASSIFICATION OF PROPERTY BURNED, NUMBER OF
FIRES AND THE FIRE LOSS ACCORDING TO
PROPERTY DESTROYED.**

Class of Property	Number	Damage
1—Apt. Houses, Flats and Rooming Houses.....	1,366	\$ 253,825
2—Amphitheatres, Grand Stand, etc.	4	7,657
3—Bakeries	61	26,895
4—Barber Shops	165	133,627
5—Barns and Stables (Not Liveries)	1,487	1,349,980
6—Churches	83	236,055
7—Depots, Stations, Waiting Rooms, etc.....	24	8,405
8—Dry Cleaning Establishments	27	8,518
9—Dry Houses, Kilns, Rooms, etc.	8	71,625
10—Dwellings	6,688	2,976,802
11—Elevators and Grain Warehouses	49	1,162,094
12—Factories	484	1,939,660
13—Foundries	40	74,652
14—Garages	258	376,788
15—Granaries	40	40,497
16—Green Houses	6	49,601
17—Halls (Lodge) (Club) (Dance) (Public) etc..	60	93,592
18—Hotels and Boarding Houses	120	159,952
19—Hospitals	10	5,671
20—Ice Houses	17	380,665
21—Jails	2	42
22—Laundries	28	27,380
23—Liveries	33	42,595
24—Mills, (Flour)	16	122,315
25—Mills, (Saw and Planing)	23	51,453
26—Office Buildings	120	94,015

27—Oil Houses	13	8,412
28—Photo Studios	7	3,460
29—Power Houses, Pump Houses & Eng. Houses	36	41,951
30—Restaurants	119	95,230
31—Saloons	164	106,054
32—Sheds	904	174,846
33—Smoke Houses	49	4,252
34—Silos	16	9,662
35—Stores	1,388	2,006,996
36—Shops, (Carpenter, Blacksmith, etc.).....	216	125,242
37—Schools, (Colleges, Seminaries, etc.).....	70	39,238
38—Theatres and Motion Picture Houses	45	81,778
39—Warehouses	167	383,564
40—Miscellaneous	218	81,383

Fires Other Than Buildings.

1—Automobiles	418	110,432
2—Boats	79	27,773
3—Bridges	8	2,665
4—Cars, (Railway) (Electric), etc.	214	145,879
5—Docks, (Coal), etc.	6	35,919
6—Fences	63	3,613
7—Grain and Hay	190	50,477
8—Junk Yards	6	13,275
9—Lumber Yards	28	202,559
10—Tanks, (Water), etc.	9	30,485
11—Tents	1	50
12—Threshing Outfits	3	2,200
13—Trestles	6	655
14—Wagons	31	1,672

15,693 \$13,485,083

DEATHS BY FIRE.

The Record That Cannot be Measured.

The number of deaths by fire in the State of Illinois has been steadily decreasing since the organization of the Fire Marshal Department in 1911.

The first year the Department was in operation the records showed that there were more than 500 people burned to death in the State in that year. This Department has carried on a campaign

of education and publicity in an effort to materially reduce this record, with the gratifying result that the records for the last two years show a material reduction in these accidental deaths. We have especially carried on a campaign of education regarding deaths by matches, bonfires and starting fires with kerosene, which at the time of the organization of the Fire Marshal Department, were the three causes which were responsible for most of these accidental deaths by fire. As a result there has been a material reduction in the accidents from bonfires and matches and a very gratifying result in the number of deaths from starting fires with kerosene.

There has, however, been a material increase in the number of deaths resulting from gasoline explosions. This is undoubtedly due to the increased use of this dangerous fluid.

During the year 1916 there were 52 deaths caused by gasoline explosions, which perhaps proves the old adage, "Familiarity breeds contempt." There were 76 persons burned to death in Illinois last year by having their clothing ignited from stoves, furnaces and open grates. The total number of persons accidentally burned to death during the entire year was 275 and most of these accidents could have been prevented by the exercise of a reasonable amount of care and caution.

The following is a complete summary of the accidental deaths by fire during the past year, listed under the various causes.

Clothing ignited from stoves and furnaces.....	76
Gasoline Explosions	52
• Burned in a burning building	39
Clothing ignited from bonfire	36
Clothing ignited by matches	30
Starting fires with kerosene	22
Miscellaneous	12
Smoking in beds	3
Clothing ignited from fire works	2
Children fell in a hot ash pan	2
Clothing ignited from Christmas Tree	1

The following comprise the roster of officers and employees of the State Fire Marshal Department:

SPRINGFIELD OFFICE.

Walter H. Bennett, State Fire Marshal.
F. R. Morgaridge, Assistant State Fire Marshal.
W. S. Hoopes, First Deputy State Fire Marshal.
Mrs. Mae S. Jones, Stenographer.
Miss Mary A. Gorman, Stenographer.
Miss Nelle Sutton, Statistician.
Alex. Perry, Janitor.

FIELD DEPUTIES.

W. L. Berger, Geneseo.
A. H. Bogardus, Springfield.
Tony Brucks, East St. Louis.
Philip R. Dunn, Springfield.
Michael J. Durr, Chicago.
J. E. Gallivan, Champaign.
Robert Harper, Rock Falls.
Edward Holland, Bloomington.
S. Legreid, Centralia.
R. B. Lytton, Metropolis.
L. C. McMurtrie, Lacon.
Matt E. Norton, Galesburg.
William R. Price, Chicago.
C. J. Roberts, Champaign.
William F. Ryan, Peoria.
J. Q. Snedeker, Marion.
Harry Moss, Springfield.

CHICAGO OFFICE.

A. A. Bach, Chief Deputy State Fire Marshal.
Frank L. Salisbury, Second Deputy State Fire Marshal.
Miss Olive M. Wilhite, Stenographer.
Miss Della Elmer, Stenographer.

DEPUTIES.

George J. Byrnes, T. A. Greely, Niels Juul, Jr., John J. McKenna,
George E. O'Donnell.

PART V.

FIRE LOSSES IN ILLINOIS CITIES.

A Comparative Statement of the Number of Fires, Fire Losses and
Other Data in Those Cities of Illinois Having More
Than 15,000 Population.

FIRE LOSSES IN ILLINOIS CITIES.

AURORA.

Population, 36,000.	Number of fire stations, 5.
Total number of fires, 229.	Number of fireman, 30.
Loss on buildings, \$5,370.	Number of pieces of motor apparatus, 6.
Loss on Personal property, \$2,263.	Fire Chief, George J. Rang.
Total Fire loss, \$7,633.	Assistant Fire Chief, Henry Ham-
Loss per fire, \$33.00.	smith.
Per capita loss, \$0.22.	

BLOOMINGTON.

Population, 35,000.	Per capita loss, \$0.25.
Total number of fires, 196.	Number of fire stations, 4.
Loss on buildings, \$4,498.	Number of firemen, 33.
Loss on personal property, \$4,468.	Number of pieces of motor apparatus, 5.
Total fire loss, \$8,966.	Fire Chief, Henry Mayer.
Loss per fire, \$45.75.	Assistant Fire Chief, Charles Abrams.

BELLEVILLE.

Population, 25,000.	Per capita loss, \$0.38.
Total number of fires, 149.	Number of fire stations, 2.
Loss on buildings, \$6,994.	Number of firemen, 18.
Loss on personal property, \$2,516.	Number of pieces of motor apparatus, 2.
Total fire loss, \$9,510.	Fire Chief, Henry C. Kunz.
Loss per fire, \$64.00.	Assistant Fire Chief, James Bosworth.

MOLINE.

Population, 25,000.	Per capita loss, \$0.66.
Total number of fires, 349.	Number of fire stations, 4.
Loss on buildings, \$9,371.	Number of firemen, 27.
Loss on personal property, \$7,085.	Number of pieces of motor apparatus, 7.
Total fire loss, \$16,456.	Fire Chief, J. Q. Hawk.
Loss per fire, \$47.00.	Assistant Fire Chief, James J. Trevor.

STREATOR.

Population, 16,000.	Per capita loss, \$1.03.
Total number of fires, 121.	Number of fire stations, 2.
Loss on buildings, \$10,968.	Number of firemen, 10.
Loss on personal property, \$5,500.	Number of pieces of motor apparatus, 2.
Total fire loss, \$16,468.	Fire Chief, Frank A. Owen.
Loss per fire, \$136.00.	Assistant Fire Chief, Daniel Worrell.

JACKSONVILLE.

Population, 17,000.	Per capita loss, \$1.13.
Total number of fires, 75.	Number of fire stations, 1.
Loss on buildings, \$13,263.	Number of firemen, 11.
Loss on personal property, \$4,849.	Number of pieces of motor apparatus, none.
Total fire loss, \$18,112.	Fire Chief, Samuel Hunt.
Loss per fire, \$241.00.	Assistant Fire Chief, Earl Butcher.

FREEPORT.

Population, 22,000.	Per capita loss, \$0.89.
Total number of fires, 124.	Number of fire stations, 3.
Loss on buildings, \$14,970.	Number of firemen, 20.
Loss on personal property, \$4,597.	Number of pieces of motor apparatus, 4.
Total fire loss, \$19,567.	Fire Chief, J. F. Rodemeyer.
Loss per fire, \$158.00.	Assistant Fire Chief, H. T. Lawson.

ROCK ISLAND.

Population, 33,000.	Per capita loss, \$0.86.
Total number of fires, 231.	Number of fire stations, 5.
Loss on Buildings, \$19,098.	Number of firemen, 28.
Loss on personal property, \$9,281.	Number of pieces of motor apparatus, 2.
Total fire loss, \$28,379.	Fire Chief, G. W. Newberry.
Loss per fire, \$123.00.	Assistant Fire Chief, D. A. Hutton.

ELGIN.

Population, 28,000.	Per capita loss, \$0.71.
Total number of fires, 102.	Number of fire stations, 5.
Loss on buildings, \$11,766.	Number of firemen, 27.
Loss on personal property, \$8,066.	Number of pieces of motor apparatus, 4.
Total fire loss, \$19,832.	Fire Chief, William Haible.
Loss per fire, \$194.	Assistant Fire Chief, None.

WAUKEGAN.

Population, 22,000.	Per capita loss, \$1.05.
Total number of fires, 97.	Number of fire stations, 2.
Loss on buildings, \$6,525.	Number of firemen, 16.
Loss on personal property, \$16,715.	Number of pieces of motor apparatus, 2.
Total fire loss, \$23,240.	Fire Chief, Sars O'Farrell.
Loss per fire, \$240.	Assistant Fire Chief, D. A. Hutton.

GALESBURG.

Population, 26,000.	Number of fire stations, 3.
Total number of fires, 196.	Number of firemen, 17.
Loss on buildings, \$15,500.	Number of pieces of motor apparatus, 1.
Loss on personal property, \$16,500.	Fire Chief, John E. Cater.
Total fire loss, \$32,000.	Assistant Fire Chief, Arthur G. Lowderman.
Loss per fire, \$168.00	
Per capita loss, \$1.23.	

CHICAGO HEIGHTS.

Population, 20,000.	Number of fire stations, 2.
Total number of fires, 104.	Number of firemen, paid 14; volunteer, 20.
Loss on buildings, \$19,695.	Number of pieces of motor apparatus, 2.
Loss on personal property, \$12,687.	Fire Chief, M. S. Philip.
Total fire loss, \$32,382.	Assistant Fire Chief, E. E. Somes.
Loss per fire, \$311.00.	
Per capita loss, \$1.62.	

JOLIET.

Population, 40,000.	Number of fire stations, 5.
Total number of fires, 263.	Number of firemen, 39.
Loss on buildings, \$19,298.	Number of pieces of motor apparatus, 7.
Loss on personal property, \$13,674.	Fire Chief, C. W. Royce.
Total fire loss, \$32,972.	Assistant Fire Chief, Thomas J. Ruddy.
Loss per fire, \$125.00.	
Per capita loss, \$0.82.	

DANVILLE.

Population, 35,000.	Per capita loss, \$0.98.
Total number of fires, 249.	Number of fire stations, 6.
Loss on buildings, \$23,943.	Number of firemen, 35.
Loss on personal property, \$10,446.	Number of pieces of motor apparatus, 1.
Total fire loss, \$34,389.	Fire Chief, Perry Cessna.
Loss per fire, \$139.00.	Assistant Fire Chief, William Hilge.

ALTON.

Population, 25,000.	Number of fire stations, 5.
Total number of fires, 119.	Number of firemen, 23.
Loss on buildings, \$17,425.	Number of pieces of motor apparatus, 2.
Loss on personal property, \$16,441.	Fire Chief, William Feldwisch.
Total fire loss, \$33,866.	Assistant Fire Chief, Barney Osterman.
Loss per fire, \$285.00.	
Per capita loss, \$1.35.	

ROCKFORD.

Population, 54,000.	Per capita loss, \$0.79.
Total number of fires, 309.	Number of fire stations, 6.
Loss on buildings, \$22,411.	Number of firemen, 67.
Loss on personal property, \$19,520.	Number of pieces of motor apparatus, 9.
Total fire loss, \$41,931.	Fire Chief, Frank E. Thomas.
Loss per fire, \$135.00.	Assistant Fire Chief, S. T. Juilan.

QUINCY.

Population, 40,000.	Per capita loss, \$1.05.
Total number of fires, 241.	Number of fire stations, 8.
Loss on buildings, \$7,809.	Number of firemen, 43.
Loss on personal property, \$34,270.	Number of pieces of motor apparatus, 3.
Total fire loss, \$42,079.	Fire Chief, George C. Marriott.
Loss per fire, \$174.	Assistant Fire Chief, Edward Schell.

KANKAKEE.

Population, 20,000.	Per capita loss, \$2.90.
Total number of fires, 90.	Number of fire stations, 2.
Loss on buildings, \$13,558.	Number of firemen, 14.
Loss on personal property, \$44,381.	Number of pieces of motor apparatus, 2.
Total fire loss, \$57,939.	Fire Chief, Monroe S. Baker.
Loss per fire, \$604.00.	Assistant Fire Chief, Edward Alberts.

CHAMPAIGN.

Population, 17,000.	Per capita loss, \$3.58.
Total number of fires, 152.	Number of fire stations, 1.
Loss on buildings, \$23,263.	Number of firemen, 10.
Loss on personal property, \$37,562.	Number of pieces of motor apparatus, 5.
Total fire loss, \$60,825.	Fire Chief, John Ely.
Loss per fire, \$400.00.	Assistant Fire Chief, Roy Alsip.

DECATUR.

Population, 41,000.	Per capita loss, \$1.55.
Total number of fires, 264.	Number of fire stations, 4.
Loss on buildings, \$35,496.	Number of firemen, 40.
Loss on personal property, \$27,961.	Number of pieces of motor apparatus, 7.
Total fire loss, \$63,457.	Fire Chief, C. W. Devore.
Loss per fire, \$240.00.	Assistant Fire Chief, Ed Platt.

EVANSTON.

Population, 32,000.	Per capita loss, \$2.75.
Total number of fires, 287.	Number of fire stations, 3.
Loss on buildings, \$28,420.	Number of firemen, 39.
Loss on personal property, \$59,707.	Number of pieces of motor apparatus, 2.
Total fire loss, \$88,127.	Fire Chief, A. H. Hofstetter.
Loss per fire, \$307.00.	Assistant Fire Chief, Thomas Norman.

OAK PARK.

Population, 35,000.	Per capita loss, \$3.24.
Total number of fires, 162.	Number of fire stations, 3.
Loss on Buildings, \$84,093.	Number of firemen, 21.
Loss on personal property, \$29,220.	Number of pieces of motor apparatus, 4.
Total fire loss, \$113,313.	Fire Chief, H. J. Schoff.
Loss per fire, \$700.	Assistant Fire Chief, George Houren.

SPRINGFIELD.

Population, 63,000.	Per capita loss, \$2.60.
Total number of fires, 647.	Number of fire stations, 8.
Loss on buildings, \$122,200.	Number of firemen, 77.
Loss on personal property, \$41,541.	Number of pieces of motor apparatus, 4.
Total fire loss, \$163,741.	Fire Chief, Peter Jacobs.
Loss per fire, \$253.00.	Assistant Fire Chief, Matt. Cullen.

EAST ST. LOUIS.

Population, 80,000.	Per capita loss, \$5.96.
Total number of fires, 496.	Number of fire stations, 7.
Loss on buildings, \$192,627.	Number of firemen, 78.
Loss on personal property, \$284,324.	Number of pieces of motor apparatus, 2.
Total fire loss, \$476,951.	Fire Chief, Michael J. Tobin.
Loss per fire, \$961.00.	Assistant Fire Chief, Phillip Thomas.

PEORIA.

Population, 100,000.	Per capita loss, \$5.96.
Total number of fires, 700.	Number of fire stations, 10.
Loss on buildings, \$119,202.	Number of firemen, 84.
Loss on personal property, \$476,810.	Number of pieces of motor apparatus, 6.
Total fire loss, \$596,012.	Fire Chief, T. N. Worm.
Loss per fire, \$805.00.	Assistant Fire Chief, E. J. Sipes.

CHICAGO.

Population, 2,500,000.	Number of fire stations, 161.
Total number of fires, 6,433.	Number of firemen, 1,974.
Loss on buildings, \$1,682,015.	Number of pieces of motor apparatus, 93.
Loss on personal property, \$2,341,675.	Fire Chief, Thomas O'Conner.
Total fire loss, \$4,023,690.	Assistant Fire Chief, Patrick J. Donahoe.
Loss per fire, \$625.00.	
Per capita loss, \$1.60.	

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SIXTH ANNUAL REPORT

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